

Accurate figures are hard to come by but it's a fair estimate that air travel is responsible for around 2,500 cases of deep vein thrombosis (DVT - clots in the deep veins of the leg) a year - the vast majority of which make a full and complete recovery. However, in some cases the clot breaks off, travels around the circulation, and lodges in the lungs, leading to a potentially fatal condition known as pulmonary embolus (PE). The accident and emergency department nearest to London's Heathrow airport recorded 30 deaths from PE in the last three years.

Who is at risk?

Studies suggest that clots are more common in long haul travellers (flights lasting 4 hours or more) and, while they can affect anyone at any age, the following groups are at particular risk: those with a past or strong family history of DVT, pregnant women and those on the contraceptive pill, smokers, people over 50, cancer patients, the very overweight, and those who have had injuries to the leg - particularly if they are in plaster (topical in view of the number of skiers flying home with broken bones).

Why is air travel particularly risky?

Sitting still in a cramped seat for long periods increases the risk of DVT whatever the mode of travel (DVT is also associated with car, train and coach travel) but there are a number of factors that may increase the risk in an aeroplane. The seats tend to be very cramped - unless you can afford business or first class. You are likely to be stuck in your seat for long periods (20 plus hours on a non-stop flight to the southern hemisphere) encouraging the pooling of blood in your legs, and the relatively low concentration of oxygen (the air is thinner in a plane flying at high altitude) makes the blood stickier and more likely to clot. Last, and probably least, dehydration induced by air conditioning may make your blood a little thicker - an effect that's probably more theoretical than practical .

So what can I do to reduce the risk?

Go for an upgrade, or as much leg room as you can get (emergency exits are the best seats in economy class). Get up and walk around the plane at least once every hour on a long haul flight (the calf muscles squeeze the veins in your lower leg encouraging healthy flow reducing the risk of DVT), drink plenty of fluid and avoid alcohol and coffee. Don't smoke for at least 12 hours before flying (and preferably give up altogether), ask your pharmacist about graduated compression stockings (which compress the veins in the leg and are used by hospitals to prevent DVT in in-patients), and consider taking half an aspirin a couple of hours before flying. I say consider because aspirin reduces the blood's stickiness but it has not yet been proven to prevent DVT in travellers, and may increase the risk of rarer forms of stroke - ask your GP if you're not sure whether it is suitable for you. High risk groups, such as those who have had a DVT in the past, may benefit from a short course of anticoagulant medication - if in doubt seek advice before flying.

http://www.surgerydoor.co.uk/line_one/drmark/RTArchive/longhaul.html

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