# Guidance Note

# Deep Vein Thrombosis

Listed below are the main points from the Department of Health website regarding the above subject.
http://www.dh.gov.uk/en/Policyandguidance/Healthandsocialcaretopics/Bloodsafety/VenousThromboembolismVTE/DVT/DH_4123480

Deep Vein Thrombosis, DVT may be associated with any form of long distance travel whether by air, car, coach or train lasting longer than 4 hours. There is an increased risk in developing DVT where passengers remain immobile in the seated position for long periods of time.

**What is DVT?**

DVT is a serious condition where blood clots develop in the deep veins of the legs. It must be distinguished from blood clots in superficial varicose veins in the legs, called phlebitis, which is much less serious.

**What are the signs of DVT?**

You may get swelling, pain, tenderness and redness especially at the back of the leg below the knee. This is different from the mild ankle swelling that many people get during long haul travel, and DVT usually, though not always, affects only one leg. These complaints may develop during the journey but more commonly hours or even days later. The pain may be made worse by bending the foot upward towards the knee. In some cases there may be no signs or symptoms of DVT at all in the legs and problems only become obvious when a pulmonary embolus (PE) develops, when the clot from the leg travels to the lungs. Fortunately PE is rare. PE can cause breathlessness, chest pain and in severe cases, collapse. Both DVT and PE, whatever the cause, are serious conditions and need urgent investigation and treatment.

**Who is at risk of DVT?**

Every year DVT occurs in about 1-3 in 1000 people in the general population.
The groups listed below constitute 90 to 95% of all those who get DVT and/or PE. The risk of DVT and PE is greater in people:

- over 40 years of age
- who have had blood clots already
- with a family history of blood clots
- suffering from or who have had treatment for cancer
- with certain blood diseases
- being treated for heart failure and circulation problems
- who have had recent surgery especially on the hips or knees
- who have an inherited clotting tendency
- who are tall

DVT is also more common in women who:

- are pregnant
- have recently had a baby
- are taking the contraceptive pill
- are on hormone replacement therapy or HRT.

**The risk of DVT from air travel**

There is evidence that long-haul flights, especially when passengers have little or no exercise, may increase the risk of developing DVT. Information on the proportion of people who develop DVT related to air travel has been investigated by the World Health Organisation who have found that 1 case of DVT in every 6000 journeys which lasted 4 hours or more.

**How to reduce the possible risk of DVT on long distance travel (over 4 hour)**

## Before the trip:

Consult your doctor if you have:

- ever had a DVT or PE condition
- a family history of clotting conditions
- an inherited tendency to clot (thrombophilia)
- cancer or had treatment for cancer in the past
- undergone major surgery in the last three months
- had hip or knee replacement within the last three months
- ever suffered from a stroke.

Ensure you have appropriate insurance through Finance and if travelling within the European Economic Area or Switzerland it would be advisable to apply for a European Health Insurance Card if you have not already done so. It will benefit you out-with travelling on University business.

## During the trip

- get comfortable in your seat and recline as much as possible
- wear loose fitting clothing
- store your hand luggage in the overhead lockers to keep the room under the seat in front of you free
- bend and straighten your legs, feet and toes while seated every half-hour or so during the flight
- press the balls of your feet down hard against the floor or foot-rest to increase the blood flow in your legs and reduce clotting
- do upper body and breathing exercises to further improve circulation
- take occasional short walks around the cabin, whilst the aircraft is cruising at altitude
- take advantage of refuelling stopovers where it may be possible to get off the plane and walk about
- drink a reasonable amount of water
- avoid alcohol, which in excess leads to dehydration and immobility
- avoid taking sleeping pills, which also cause inertia

## After the trip

- For the vast majority of air passengers there will be no problem. However, if you do develop swollen painful legs especially where one is more affected than the other, or have breathing difficulties see a local doctor urgently or go to the nearest Accident and Emergency Department.

- Inform the University, by contacting your Head of Department or Departmental Safety Convener in order that they can inform the Occupational Health Service who can advise, investigate and monitor the situation.