

With summer vacations quickly approaching, it is important to start thinking about leg and back health while flying or driving.

When sitting in a stationary position for an extended period of time, blood clots can form in the legs. Recent news of Vice President Dick Cheney being treated for a deep vein thrombosis (DVT) has brought increased awareness to this ailment. Upon landing or standing, small clots typically dissolve, while larger clots may not. The larger clots may eventually break loose days or weeks later and could travel to the heart or lungs, possibly resulting in death. Signs of a DVT include swelling in one or both legs and tenderness, warmth and/or redness in the calf. If a clot travels to the lungs, it is termed a pulmonary embolism. Symptoms include shortness of breath and a high heart rate. If you experience any of these symptoms, you should contact your doctor, especially if they are present following a period of immobilization.

When sitting still for long periods of time, people may experience cramping in the legs or toes, general lower-body aches or swelling of the feet. The American Physical Therapy Association (APTA) suggests that you stretch and do simple seated exercises. These will help to keep blood flowing, joints mobile and muscles relaxed while traveling. If possible, try not to stay seated during the duration of the flight. Walk up and down the aisle every hour. Drinking water before and during a flight can also help to prevent cramping as a result of dehydration, which can occur due to the high altitude and dryness in the pressurized air cabin.

If you are unable to exercise during your flight, you can try wearing compression stockings to reduce the risk of a blood clot. Stockings apply pressure to the lower-leg, thus compressing the veins and returning fluid back to your heart. Compression stockings or TED hose can be purchased over the counter or may be covered by insurance with a physician referral.

Another possible risk of flying (or traveling in the car) is back pain because sitting puts stress on the lower back. This can be prevented by performing stretches for the back muscles. When flying, try placing your feet on top of your luggage to place your knees slightly higher than your hips. If you have a history of low back or hip pain, contact your physical therapist for appropriate guidance on positioning and exercise.

The following exercises adapted from the APTA can be performed while flying. As with all exercise, stop activity if you have pain or contact your physician or physical therapist prior to performing activity.

For further information, contact Northern Rehabilitation and Sports Medicine Associates in DeKalb, Gena or Rochelle by phone 815-756-8524 or email through our website [www.northernrehabpt.com](http://www.northernrehabpt.com).

## APTA In Flight Fitness Guide

When you have little room to move and stretch on the plane, physical therapists advise doing some simple, seated exercises to keep the blood flowing, the joints mobile, and the muscles relaxed while en route.

**Heel Raises** - Sit with feet flat on the floor, about hip-width apart. Lift heels so that only toes and the balls of the feet are on the floor. Hold for 5-10 seconds and lower feet back to the ground. Repeat 10 times.

**Toe Lifts** - Sit with feet flat on the floor, about hip-width apart. Lift toes and balls of the feet so that only the heels are on the floor. Hold for 5-10 seconds and lower feet back to the ground. Repeat 10 times.

**Ankle Circles** - While sitting, lift right leg slightly off the ground and rotate the foot clockwise, making a circle in the air. Do this 15 times clockwise, then 15 times counterclockwise. Repeat with left leg and foot. Alternatively, trace the letters of the alphabet in the air with the right, and then the left, foot.

**Overhead Stretches** - Stand and reach arms straight up and stretch. Slowly lean to the left, then to the right, bending at the waist. Repeat this action five times to each side, holding each for 5-10 seconds. If you are unable to stand and stretch, then reach arms straight up while seated. If you have room, slowly stretch to each side as well.

**Back Twists** - While sitting, reach the right arm across the body and grab the left armrest. Slowly turn the torso and head as far to the left as is comfortable. Hold for 5-10 seconds, repeat five times, and then switch sides.

**Curl Downs** - While sitting, pull stomach and chin in \_ and gently curl trunk down very slowly, reaching hands to the floor. Hold for 5-10 seconds \_ then uncurl slowly back up. Repeat five times.

**Toe-Heel Walk** - When walking down the aisle of the plane, walk on your toes one way and then return to your seat by walking on your heels.

For further information, contact Northern Rehabilitation and Sports Medicine Associates in DeKalb, Genoa or Rochelle by phone 815-756-8524 or email through our website [www.northernrehabpt.com](http://www.northernrehabpt.com).