

3. Tips for Taking a Pedal Pulse

Leg and foot ulcers are common among older people with diabetes. The underlying cause is often peripheral artery disease - blockage in large or small blood vessels. The level of blockage can be assessed using a technique called pedal (foot) pulse palpation. However, finding the pedal pulse can be difficult, especially in those with lower leg edema (swelling).

Here are some tips for finding pedal pulses:

- It may help to become familiar with the main arteries to the feet. Many podiatry websites have this information, such as http://www.eorthopod.com/public/patient_education/6479/foot_anatomy.html.
- Use your three middle three fingers together when trying to find the pulse in order to cover more area.
- For the **dorsal pedal artery**, start at the middle of the foot (from the top of the foot) and inch your way back and forth until you find the pulse. Move down the crease between the first and second foot bones above the toes (metatarsals). If you can't find a pulse, move up toward the middle of the ankle.
- For people with a lot of edema, you just have to press firmly until the edema is pushed away from where you are pressing. You will probably leave marks where you were pressing. This process can be very time consuming.
- The groove between the inner anklebone and the Achilles tendon that runs from the back of the heel into the calf is where the **posterior tibial pulse** can be found. This pulse can be difficult to feel if the person has a lot of swelling. If you push too hard, you may block the blood vessel and not feel it pulsate.
- If you cannot find a foot pulse, you may have to refer the resident to a foot specialist.
- If you DO find a pulse, make sure it is not your own. It is easy to confuse a pedal pulse with your own finger pulsating.

