# **BioPed** The Diabetic Foot



People with diabetes are at risk of developing foot complications. One of the most common side effects of diabetes is developing a loss of feeling in the feet. We call this loss of sensation - neuropathy. Neuropathy is a concern because without sensation, something as simple as a shoe rubbing due to an improper fit can cause a wound. These wounds allow direct entry of bacteria into the tissues, resulting in infection and possible amputation. This brochure will outline the types of feet at risk for a wound and provide insight into treatments related to diabetic complications.

## - CAUSE

Neuropathy occurs when the high level of sugars in the blood of a diabetic patient attack and damage the smallest of nerves, which are found in hands and feet. Blood vessels in the feet can also be affected resulting in cold or crampy feet and legs. If you are experiencing tingling, burning, numbness, pain or cramping, you need to see a Foot Specialist immediately.

## EFFECT

Diabetes can cause wounds due to a combination of areas of high pressure and loss of sensation. These foot types are at a greater risk of high pressure points:



FLAT FEET Flat arches will cause the foot and ankle to tip inward. This position results in instability and increases the pressure on the big toe as well as the heel.



HIGH-ARCHED FEET The high-arched foot forms a tripod where pressure is increased under the 1st and 5th toes and the heel. Muscles become imbalanced causing hammertoes, which rub on footwear and cause wounds.



SHORT FIRST TOE A short first toe is less effective in propulsion when walking, and results in pressure being transferred to the ball joint of the second toe. The second toe is unable to handle such pressure, and frequently results in a thick callus or wound.



STIFF BIG TOE JOINT

Arthritis or stiffness in the big toe joint, means that in order to propulse when walking or running, the small joint in the big toe needs to move more than it should. As a result, increased pressure is placed under the big toe and this leads to a wound.

## THE SOLUTION



### **ROUTINE FOOT CHECK-UPS**

See your Doctor or your local Chiropodist for a foot assessment at least once a year. You may be advised to return more frequently for monitoring depending on the level of risk your feet are at for complications. For example, if you have difficulty seeing the bottom of your feet, have lost sensation or have diminished blood flow to your feet, you may need to visit a Chiropodist every 2-3 months.



### **GOOD FOOT HYGIENE**

Check your feet daily for cuts, scrapes, redness or swelling using a hand-held mirror. If you notice toenail deformities, calluses, or wounds, contact a Chiropodist immediately. Cut your toenails straight across and try not to cut them too short to prevent complications. If you have difficulty with vision, reaching your feet or cutting your toenails, you can make an appointment with our BioPed Chiropodist or Foot Care Nurse for nail, corn or callus care. It's important to moisturize your feet daily. Diabetic skin tends to be drier than normal skin, and is more vulnerable to complications, such as ulcers and fissures. Emollients containing urea, such as Footlogix Very Dry Skin, are good choices for this type of skin, as they penetrate deeper into the skin and provide longer lasting effects.



#### FOOTWEAR AND SOCKS

Diabetics should avoid going barefoot and opt for supportive sandals to wear in the house. For outdoors, stable footwear with adequate depth in the toebox is recommended to provide optimal support and protection for the diabetic foot. BioPed carries a wide selection of fashionable diabetic footwear that can even accommodate an orthotic. Lastly, it is recommended that diabetic patients do not wear closed shoes without socks. BioPed carries diabetic socks that don't restrict blood supply to the feet to keep your feet warm and safe.



#### **CUSTOM-MADE ORTHOTICS**

To reduce the pressure on your feet, a custom-made orthotic is advised. A BioPed Pedorthist or Chiropodist will perform an evaluation and take a mould of your feet to fabricate a pair of orthotics unique to you. Special materials are utilized if you are diabetic so be sure to tell your clinician of your diagnosis. BioPed clinical specialists are trained to build support, correction, and pressure relief right into your orthotics.











