

Diabetic Neuropathy



ALASKA NATIVE
TRIBAL HEALTH
CONSORTIUM



What is diabetic neuropathy?

Diabetic neuropathy is nerve damage from diabetes.

Your body has different types of nerves. Any of the nerves can be damaged by diabetes. The types of nerves that can be found in your body are:

Autonomic Nerves: These are the nerves that control important body functions. The autonomic nerves help do things like digest food, help you sweat when you are hot, or make your heart beat faster when you run. You don't think about your autonomic nerves, when they are working right, they work "automatically".

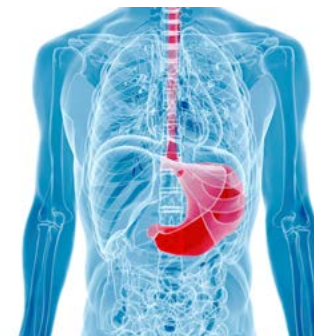
Peripheral Nerves: These are the nerves that help your hands and feet work well. The peripheral nerves keep the muscles and joints in the feet working together. They are also responsible for other important functions like pain. If you step on something sharp, and you jerk your foot away, you can thank your peripheral nerves for protecting your foot from further damage.

What parts of the body are most commonly affected by diabetic neuropathy?

Sexual function: Diabetic neuropathy can affect sexual function for both men and women. Men may suffer from erectile dysfunction. This is when the penis is not able to get erect or stay erect long enough to have sex. A woman may feel less sensation during sex, or have an inability to produce enough lubrication to make sex comfortable. Talk to your provider if you are having problems with your sexual function. There are many ways to treat these common problems.

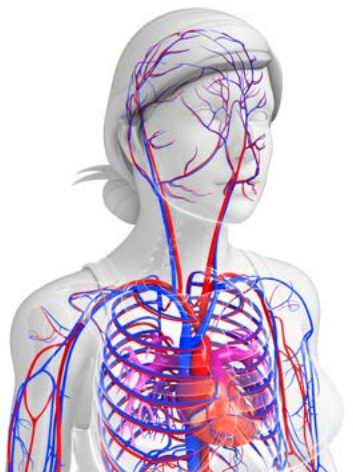
Digestion: Diabetes neuropathy can sometimes slow digestion down and cause problems in food absorption. This problem is known as gastroparesis. When a person has gastroparesis, they may vomit and feel bloated. When food absorption is not predictable, a person may have problems with unexpected high blood sugars and low blood sugars. It can also make it difficult to use some medications or types of insulin.

Nerves also control our **bowel movements**. Nerve damage in the digestive system can sometimes cause diarrhea. For others it may cause



constipation. Talk to your provider and dietitian about any digestion problems you are having, as well as treatment options.

Heart and blood vessel function: When you walk faster, your heart rate speeds up. When you slow down, your heart rate goes slower. Nerves control this. When a person has nerve damage the heart may not speed up or slow down like it is supposed to. If a person has blood vessel nerve damage, they may get dizzy from standing up or faint from changing position.



When a person has nerve damage to their heart or blood vessels, it is important to learn techniques for standing up, lying down and walking that can help to keep them safe. Talk to your provider if you are having any of these problems.

Bladder: Nerves control our bladders. When the nerves in the bladder have damage a person may not be able to tell when they need to pee, this can increase a person's risk of getting a bladder infection. There are techniques a person can use to help clear their bladder of urine. People can also learn to recognize symptoms of bladder infections. Some people may not feel pain from a bladder infection, but they may notice an unexpected increase in their blood sugars. This can be a symptom of an infection.

Other people may have problems with incontinence (peeing when you don't mean to). There are tools to help with this problem.

Sweat glands: Sweating is the body's way of cooling itself off. When you are hot or exercise your body will often sweat to keep it from getting overheated. In diabetes neuropathy a person's body may not sweat, even though they are hot or exercising. The person can get overheated.

Your sweat glands also keep your skin moist and helps prevent cracking in the skin. Your skin is a barrier that protects your body from germs. If your sweat glands can no longer keep your skin moist due to nerve damage, it will be important to use lotions or moisturizers to keep your skin healthy. Talk to your educator for more information.

Nerve pain: For some people, diabetic neuropathy means foot or leg pain.

This can feel like tingling, a burning sensation, cramping or an uncomfortable feeling of wanting to move your legs when you are resting.

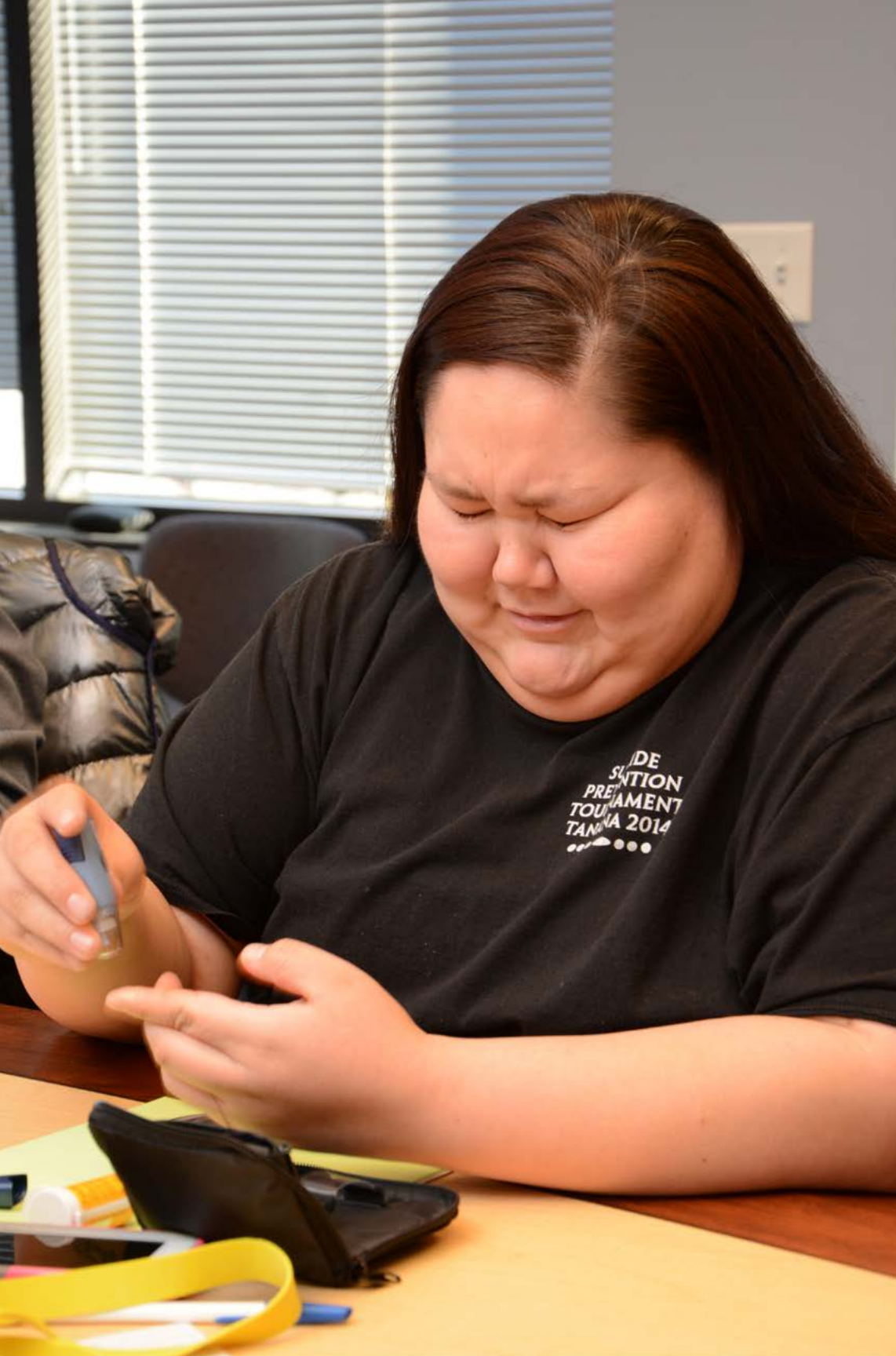
Treatments for nerve pain may include medications, stretches, or creams. Controlling blood sugars can help to prevent further damage.



Lack of feeling in feet: Nerve damage can cause a lack of feeling in the feet. When a person does not have feeling in their feet, they are at high risk for amputation. This is because being able to feel pain helps protect feet from being injured. When a person cannot feel if something is causing injury to their feet, they must learn to use their eyes and hands to check for problems. There are many things that can be done to help protect feet and prevent amputation. Work with your diabetes educator to learn what these things are. Make sure your provider looks at your feet at every clinic visit and does a full foot exam that checks for pulses and sensation at least once a year.

Loss of symptoms for low blood sugars: Often, when a person has a low blood sugar they may feel sweaty, shaky or their heart might beat fast. Diabetic neuropathy can cause some people who have had diabetes for many years to stop feeling these symptoms.





A symptom for low blood sugar that is NOT affected by diabetic neuropathy is confusion. A person who has lost their ability to feel most symptoms of low blood sugar can still know when they are having a low blood sugar by learning to look for different symptoms. When a person is not able to think of a word, or is having difficulty remembering what they were doing or where they are going, they should check for low blood sugar. The person's family members and friends should be taught to look for confusion as a symptom of low blood sugar also.

Eyesight: Nerves help the eyes adjust from dark to light and light to dark. When a person has nerve damage that affects this function of their eye, it may make some tasks, like driving at night more difficult.

How is diabetic neuropathy diagnosed?

There are different tests used to diagnose the various types of nerve damage. Reporting your symptoms to your provider is the first step in making sure your neuropathy gets treated and further problems are being prevented.

Who gets diabetic neuropathy, and how is it treated?

About half of people with diabetes will get some type of nerve damage. A person is more likely to get nerve damage if they have had diabetes a long time and if they have uncontrolled blood sugars.

Depending on which nerves are being affected, there are skills, treatments and tools to help with the symptoms. For example, nerve damage to the digestive system may be helped by a change in meal plan, while nerve damage to sex function may be helped by medication. Talk to your provider about your specific problems and concerns. Your provider can share with you the best tools to address your needs.

These lifestyle changes can help prevent neuropathy, or prevent further nerve damage:

- **Controlling blood sugars:** Even if you have some nerve damage now, it is important to know that getting blood sugars under control can help prevent further damage.
- **Avoid tobacco:** Tobacco narrows the arteries reducing the blood flow to your feet. When the nerves can't get enough blood, they become damaged.

More Information

For more information or if you have questions, contact:

Diabetes Educator: _____

Phone: _____



Diabetes Program

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