

# Foot Pain

Three sources of information on foot pain are provided in this document:

- Articles on foot pain are provided by the US Government's National Institutes of Health (NIH) at <http://www.nlm.nih.gov/medlineplus/fothealth.html> (see links below) and at <http://www.nlm.nih.gov/medlineplus/ency/article/003183.htm>.
- Peripheral neuropathy should be particularly considered if pain is evenly and generally distributed in both feet. See NIH article on peripheral neuropathy below and at: <http://www.ninds.nih.gov/disorders/peripheralneuropathy/peripheralneuropathy.htm>.
- Another common cause of foot pain is plantar fasciitis. This pain occurs on the sole of the foot near the front of the heel. See [http://orthoinfo.aaos.org/fact/thr\\_report.cfm?Thread\\_ID=144&topcategory=Foot](http://orthoinfo.aaos.org/fact/thr_report.cfm?Thread_ID=144&topcategory=Foot) and <http://content.nejm.org/cgi/content/short/350/21/2159>).

To obtain a free copy of the present document, go to [www.masterdocs.com](http://www.masterdocs.com).

Foot pain is frequently related to being overweight, wearing ill-fitting shoes or standing for long periods of time, and is more frequent in older people.

Causes of foot pain include:

- Bunions (at the base of the big toe)
- Hammer toes (curl downwards)
- Calluses on the balls of the feet or the heels
- Corns on the toes
- Plantar fasciitis (heel spur)
- Fallen arches (flat feet)
- Stress fracture
- Strains, sprains or other fractures
- Tendinitis
- Arthritis (e.g., osteoarthritis, rheumatoid arthritis or gout)
- Plantar warts
- Bursitis of heel
- Peripheral neuropathy (usually associated with burning general pain in both feet)
- Morton's neuroma (a thickening around a nerve in your foot, often between your third and fourth toes, and causing a sharp, burning pain in the ball of your foot or toes)

Home treatment of acute foot pain that does not require emergency medical attention is often based on the **RICE** regimen:

- **Rest:** No weight bearing for 24 hours or longer. Also try not to move the foot.
- **Ice:** Apply ice packs using a towel over a plastic bag to the area that is painful. Be careful to avoid frostbite. Apply ice for ¼ hour every hour for 24 hours.

- **Compression:** An ACE bandage or other soft elastic material should be applied to the foot to help prevent the development of edema (fluid in the tissues).
- **Elevation:** Elevating the foot helps in removing edema. By having the foot higher than the hip (or heart), gravity is used to pull edema out of the foot.

Additional acute therapy of acute foot pain can include pain relievers such as acetaminophen.

Treatment of other causes of foot pain depends on the cause of the pain and can include:

- Losing weight
- Getting properly fitting shoes with good arch support and cushioning
- Foot pads for the affected area
- OTC wart removal preparation
- Soak calluses or corns in warm water and run down with pumice stone
- Shoe inserts for plantar fasciitis
- Local injections of corticosteroids
- Cane, crutches or cast.
- Taping of broken toes
- Surgery for bunions or hammer toes
- Peripheral neuropathy (often associated with diabetes) can be hard to treat.

Contact your health care provider for:

- Sudden very severe pain with or without acute injury
- Joint swelling
- Open sore on foot
- Signs of infection (hot, red, painful area or fever)
- Persistent pain after several weeks.

People with diabetes or poor circulation (peripheral vascular disease) should take especially good care of their feet and contact their health care provider for any persistent problem.

**LINKS** (at <http://www.nlm.nih.gov/medlineplus/fothealth.html>):

## **Overviews**

- Adult Foot (American Orthopaedic Foot and Ankle Society)

## **Anatomy/Physiology**

- Foot Skeletal Structure (American Podiatric Medical Association)

## **Diagnosis/Symptoms**

- Initial Evaluation: What Kind of Shape Are Your Feet In? (American Orthopaedic Foot and Ankle Society)

- Watch Out for These Red Flags (American Orthopaedic Foot and Ankle Society)

## **Treatment**

- Smelly (Malodorous) Feet (American Academy of Orthopaedic Surgeons)

## **Clinical Trials**

- ClinicalTrials.gov: Shoes (National Institutes of Health)

## **Specific Conditions**

- Aerobics & Your Feet (American Academy of Podiatric Sports Medicine, American Podiatric Medical Association)
- Baseball & Your Feet (American Academy of Podiatric Sports Medicine)
- Basketball & Your Feet (American Academy of Podiatric Sports Medicine)
- Cycling & Your Feet (American Academy of Podiatric Sports Medicine)
- Flatfeet (Mayo Foundation for Medical Education and Research)
- Foot Swelling When Traveling (Mayo Foundation for Medical Education and Research)
- Footdrop (Mayo Foundation for Medical Education and Research)
- How to "Read" Your Footprints (American Orthopaedic Foot and Ankle Society)
- Keep Your Feet Flexible (American Orthopaedic Foot and Ankle Society)
- Normal and Abnormal Changes in the Foot (American Orthopaedic Foot and Ankle Society)
- Running and Your Feet (American Academy of Podiatric Sports Medicine)
- Walking and Your Feet (American Academy of Podiatric Sports Medicine)

## **Prevention/Screening**

- Practice Good Foot Hygiene and Toenail Care (American Orthopaedic Foot and Ankle Society)
- Taking Care of Your Foot and Ankle (American Physical Therapy Association)

## **Nutrition**

- Eat Right . . . Your Feet Will Thank You (American Orthopaedic Foot and Ankle Society)

## **Related Issues**

- Athletic Shoes: Choosing the Right Footwear (Mayo Foundation for Medical Education and Research)
- Footwear Guide (American Academy of Orthopaedic Surgeons)
- Know Your Sports Shoes (American Orthopaedic Foot and Ankle Society)

- Lacing Techniques for Proper Shoe Fit (American Orthopaedic Foot and Ankle Society)
- Shoes (American Academy of Orthopaedic Surgeons). Also available in: Spanish.

## Organizations

- American Academy of Podiatric Sports Medicine
- American College of Foot and Ankle Surgeons
- American Orthopaedic Foot and Ankle Society
- American Podiatric Medical Association
- National Institute of Arthritis and Musculoskeletal and Skin Diseases. Also available in: Spanish

## Women

- Do You Abuse Your Feet? (Harvard Medical School, IntelliHealth)

## Children

- Guide to Children's Shoes (American Orthopaedic Foot and Ankle Society)
- Pitter Patter of Children's Healthy Feet (American College of Foot and Ankle Surgeons)
- Sports and Your Children's Feet (American Academy of Podiatric Sports Medicine, American Podiatric Medical Association)

## Seniors

- Foot Care (National Institute on Aging). Also available in: Spanish

# Neuropathic Pain in the Feet

<http://www.ninds.nih.gov/disorders/peripheralneuropathy/peripheralneuropathy.htm>

## What is Peripheral Neuropathy?

Peripheral neuropathy describes damage to the peripheral nerves, the vast communications network that transmits information from the brain and spinal cord to every other part of the body. It may be caused by diseases of the nerves or as the result of systemic illnesses. Many neuropathies have well-defined causes such as diabetes, uremia, AIDs, or nutritional deficiencies. In fact, diabetes is one of the most common causes of peripheral neuropathy. Other causes include mechanical pressure such as compression or entrapment, direct trauma, penetrating injuries, contusions, fracture or dislocated bones; pressure involving the superficial nerves (ulna, radial, or peroneal) which can result from prolonged use of crutches or staying in one position for too long, or from a tumor; intraneural hemorrhage; exposure to cold or radiation or, rarely, certain medicines or toxic substances; and vascular or collagen disorders such as atherosclerosis, systemic lupus erythematosus, scleroderma, sarcoidosis, rheumatoid arthritis, and polyarteritis

nodosa. A common example of entrapment neuropathy is carpal tunnel syndrome, which has become more common because of the increasing use of computers. Although the causes of peripheral neuropathy are diverse, they produce common symptoms including weakness, numbness, paresthesia (abnormal sensations such as burning, tickling, pricking or tingling) and pain in the arms, hands, legs and/or feet. A large number of cases are of unknown cause.

## **Is there any treatment?**

Therapy for peripheral neuropathy differs depending on the cause. For example, therapy for peripheral neuropathy caused by diabetes involves control of the diabetes. In cases where a tumor or ruptured disc is the cause, therapy may involve surgery to remove the tumor or to repair the ruptured disc. In entrapment or compression neuropathy treatment may consist of splinting or surgical decompression of the ulnar or median nerves. Peroneal and radial compression neuropathies may require avoidance of pressure. Physical therapy and/or splints may be useful in preventing contractures (a condition in which shortened muscles around joints cause abnormal and sometimes painful positioning of the joints).

## **What is the prognosis?**

Recovery from peripheral neuropathy is usually slow. Depending on the type of peripheral neuropathy, the patient may fully recover without residual effects or may partially recover and have sensory, motor, and vasomotor (blood vessel) deficits. If severely affected, the patient may develop chronic muscular atrophy.

## **What research is being done?**

The NINDS supports a broad program of research on disorders of the peripheral nervous system, including peripheral neuropathy. Much of this research is aimed at increasing the understanding of peripheral neuropathy and finding ways to prevent and cure the disorder.

## **Organizations**

### **American Chronic Pain Association (ACPA)**

P.O. Box 850  
Rocklin, CA 95677-0850  
ACPA@pacbell.net  
<http://www.theacpa.org>  
Tel: 916-632-0922 800-533-3231  
Fax: 916-632-3208

### **Neuropathy Association**

60 East 42nd Street  
Suite 942  
New York, NY 10165-0999  
[info@neuropathy.org](mailto:info@neuropathy.org)

### **National Chronic Pain Outreach Association (NCPOA)**

P.O. Box 274  
Millboro, VA 24460  
[ncpoa@cfw.com](mailto:ncpoa@cfw.com)  
<http://www.chronicpain.org>  
Tel: 540-862-9437  
Fax: 540-862-9485

### **National Foundation for the Treatment of Pain**

P.O. Box 70045  
Houston, TX 77270  
[markgordon@paincare.org](mailto:markgordon@paincare.org)  
<http://www.paincare.org>

<http://www.neuropathy.org>  
Tel: 212-692-0662 800-247-6968  
Fax: 212-692-0668

Tel: 713-862-9332  
Fax: 713-862-9346

**American Pain Foundation**

201 North Charles Street  
Suite 710  
Baltimore, MD 21201-4111  
[info@painfoundation.org](mailto:info@painfoundation.org)  
<http://www.painfoundation.org>  
Tel: 888-615-PAIN (7246) 410-783-7292  
Fax: 410-385-1832

**National Kidney & Urologic Diseases  
Information Clearinghouse (NKUDIC)**

3 Information Way  
Bethesda, MD 20892-3580  
[nkudic@info.niddk.nih.gov](mailto:nkudic@info.niddk.nih.gov)  
<http://www.niddk.nih.gov>  
Tel: 301-654-4415 800-891-5390

**Charcot-Marie-Tooth Association  
(CMTA)**

2700 Chestnut Parkway  
Chester, PA 19013-4867  
[CMTAssoc@aol.com](mailto:CMTAssoc@aol.com)  
<http://www.charcot-marie-tooth.org>  
Tel: 610-499-9264 800-606-CMTA  
(2682)  
Fax: 610-499-7267

**Muscular Dystrophy Association**

3300 East Sunrise Drive  
Tucson, AZ 85718-3208  
[mda@mdausa.org](mailto:mda@mdausa.org)  
<http://www.mdausa.org/>  
Tel: 520-529-2000 800-572-1717  
Fax: 520-529-5300

**American Diabetes Association**

1701 North Beauregard Street  
Alexandria, VA 22311  
[customerservice@diabetes.org](mailto:customerservice@diabetes.org)  
<http://www.diabetes.org>  
Tel: 800-DIABETES (342-2383)  
703-549-1500

**National Diabetes Information Clearinghouse  
(NDIC)**

1 Information Way  
Bethesda, MD 20892-3560  
[ndic@info.niddk.nih.gov](mailto:ndic@info.niddk.nih.gov)  
<http://www.diabetes.niddk.nih.gov>  
Tel: 301-654-3327 800-860-8747

**Related NINDS Publications and Information**

Chronic Pain: Hope Through Research  
Chronic pain information page compiled by the National Institute of Neurological Disorders and Stroke (NINDS).

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Last updated December 03, 2004

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