



## LOCATIONS

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Ph: 515-967-4124

130 North 1st Street  
Carlisle, IA 50047  
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Indianola Physical Therapy  
1507 N. 1st Street  
Indianola, IA 50125  
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209 W. 2nd Street  
Madrid, IA 50156  
Ph: 515-795-2427

Dallas County Hospital  
610 Tenth Street  
Perry, IA 50220  
Ph: 515-465-7672

Franklin General Hospital  
1720 Central Ave. E  
Hampton, IA 50441  
Ph: 641-456-5034

Greene County Medical Center  
100 West Lincolnway Street  
Jefferson, IA 50129  
Ph: 515-386-0284

Knoxville Hospitals & Clinics  
1002 South Lincoln  
Knoxville, IA 50138  
Ph: 641-842-1464

Van Diest Medical Center  
2350 Hospital Drive  
Webster City, IA 50595  
Ph: 515-832-7735

Story County Medical Center  
640 South 19th Street  
Nevada, IA 50201  
Ph: 515-382-7008

Wayne County Hospital  
417 South East Street  
Corydon, IA 50060  
Ph: 641-872-5278



**21<sup>st</sup>CENTURY<sup>®</sup>**  
**REHAB**

Work well. Play well. Live well.

### About 21st Century Rehab

21<sup>st</sup> Century Rehab is dedicated to you, and in providing the utmost of patient-centered care. Whether you need intensive rehabilitation after a sport injury or surgery, or occupational health services for your employees, or quick recovery from back or neck pain, you'll find the services you need at 21<sup>st</sup> Century Rehab. We look forward to becoming a resource for your good health...now and after your therapy is over.

Our staff of physical, occupational, and speech therapists and certified athletic trainers provides treatment for the following injuries:

- Arm, Wrist or Hand Problems
- Carpal Tunnel Syndrome
- Pain and/or Dysfunction Related to Arthritis
- Balance Impairments or Vertigo
- Post-Surgical Rehabilitation
- Athletic Injuries
- Occupational Health (Consultation, Risk Reduction Services and Treatment of Work-Related Injuries)
- Back, Neck and Shoulder Pain
- Hip, Knee, Ankle or Foot Pain
- TMJ Disorders, Headaches, or Facial Pain



*Taking Care of Your*

# FOOT & ANKLE

## What Causes Foot And Ankle Problems?

Our feet and ankles are called upon to perform a remarkable achievement of biomechanics – they keep our bodies upright and stable while permitting us to run and walk. This puts great pressure on our feet and ankles. It can also turn what were initially minor problems into major ones.

Shoes are often the culprits. The legions of women who have forsaken “heels” for athletic shoes on their daily commutes to the workplace are a vivid reminder of the effect that shoes have on our daily lives. And it’s not just women who suffer from the dictates of fashion: many men also feel compelled to squeeze their feet into fashionable European-style loafers or tight “executive” shoes at the expense of comfort and, ultimately, health.

If you’re going to stay on your feet and keep going, your shoes have to fit right, be comfortable, and provide support – and support means maximum coverage of the surface area under the plantar arch. Your shoes need to be able to absorb shock while you walk, and provide stability to the heel area.

## Foot And Ankle Injuries

The most commonly reported injuries in the foot/ankle region are ankle sprains. A sprained ankle simply means that the ligaments (the strong bands of tissue that connect the bones of the foot) are stretched beyond their normal limits, resulting in inflammation, tearing, or rupture of the tissue. Sprained ankles run the gamut from minor to serious. If you’re in pain for more than a day or two, or if the pain is intense, you should see a physical therapist or physician. If physical therapy is required, the sprained ankle will be treated with PRICE principals (protection, rest, ice, compression and elevation) to prevent further damage and to give the tissue a chance to heal. After that, therapy progresses quickly with exercises designed to restore stability and strength to the muscles as well as the patient’s sense of balance.

“Shin splints” is a catch-all phrase for a number of foot and ankle problems, including overuse of the muscles and tendons of the foot and ankle. Tendons are the strong fibrous cords that attach muscles to bones. The Achilles tendon, which takes its name from ancient mythology, is easily felt at

the back of the ankle. Achilles tendinitis is an inflammation of this tendon, often resulting from sports (such as basketball or aerobic dancing) that require a great deal of jumping.

Plantar fasciitis is an irritation of the plantar fascia – the tough tissue on the very bottom of the foot that begins at the heel and is attached to the toes. It can result in pain and lead to a heel spur, a bony growth on the underside, forepart of the heel bone. This kind of pain is usually at its worst in the morning, then gradually diminishes during the day. Heel spurs are caused by straining the foot muscles, stretching the long band of tissue connecting the heel and the ball of the foot, and by repeated tearing of the lining of the membrane that covers the heel bone.

Metatarsalgia is pain in the forefoot, usually caused by the over-prominence of one of the metatarsal heads, i.e., the heads of the bones in the ball of the foot. All of these overuse conditions can be aggravated by excessive pronation with walking.

People who are on their feet all day – salespeople, trial lawyers, teachers, nurses, athletes - are at risk for a variety of foot and ankle disorders, including tarsal tunnel syndrome. While not as well-known as its “cousin” carpal tunnel syndrome (in the wrist), tarsal tunnel syndrome can be just as painful. As with many foot problems, tarsal tunnel syndrome can often be blamed on shoes that do not provide enough arch support and heel stability. Ill-fitting shoes cause the foot to pronate excessively; when this happens, one of the thick ligaments running from the ankle to the bottom of the foot can become stretched and inflamed. This in turn can irritate a major nerve running just behind the ligament, resulting in tingling and numbness. If the standard treatments for heel pain are ineffective, a physician should be consulted about the possibility of other treatment options.

Flat feet, also called “pancake feet,” is a condition in which the arch is judged to be lower than normal. Flat feet can cause discomfort, and sometimes can lead to plantar fasciitis or other problems.

High arches, as opposed to flat feet, is a condition in which the arches are higher than normal. The main concern here is to make sure that the shoes have enough surface contact and support for the arches; otherwise, the stresses put on the foot and ankle can move “up the chain” through the legs and spinal column. In some cases, high arches may require custom orthopedic shoe inserts to prevent more serious problems.

## How Physical Therapy Can Help

At 21st Century Rehab, we believe that physical therapy is tailored to each individual’s problems and needs, but certain procedures are common in dealing with foot and ankle disorders. Typically, your physical therapist will begin your rehabilitation by taking a detailed history and evaluation of your problem. Related issues such as diabetes, arthritis, and vascular disease are assessed during this initial phase.

The second part of your therapy is often gait analysis, in which the physical therapist observes you as you walk or run. The physical therapist will take detailed notes, sometimes using video cameras as a diagnostic tool.

At this point the physical therapist may assess your range of motion – how far and in what directions you can move your foot and ankle, with and without assistance. The physical therapist may also perform tests to assess the strength, sensation, and blood circulation in your foot and ankle. Special tests may be performed as needed, including assessments of individual joints and ligaments. A biomechanical assessment can determine how the foot and ankle align with the lower extremities.

Physical therapists may choose from an array of options in treating you, including exercises for flexibility, stability, balance, strength, coordination, and restoration of range of motion, as well as massage, electrical stimulation, ultrasound, traction or mobilization, or heat or cold. These allow the physical therapist to create a program that is custom-designed for your particular problem. The physical therapist may consult with other health care practitioners to provide special bandages, braces, supports, casts, or shoe inserts.

To avoid or overcome a foot or ankle problem you may need to learn some new habits or modify your current level of physical activity, whether it involves work, recreation, or both. Once your goals are met, your physical therapist will help you continue therapy on your own with a home program designed to fit your needs. Our goal is to return you to normal activity as quickly as possible, with the knowledge you need to prevent reinjury or disability