

## 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

## LOCATIONS

[www.21stcenturyrehab.com](http://www.21stcenturyrehab.com)

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Altoona, IA 50009  
Ph: 515-967-4124  
Fax: 515-967-9094

270 SW 1st Street  
Suite H  
Grimes, IA 50111  
Ph: 515-986-9667  
Fax: 515-986-9642

Indianola Physical Therapy  
1507 N. 1st Street  
Indianola, IA 50125  
Ph: 515-961-7435  
Fax: 515-961-7436

Dallas County Hospital  
610 Tenth Street  
Perry, IA 50220  
Ph: 515-465-7672  
Fax: 515-465-7655

Hamilton Hospital  
800 Ohio Street  
Webster City, IA 50595  
Ph: 515-832-7735  
Fax: 515-832-9420

Story County Medical Center  
630 Sixth Street  
Nevada, IA 50201  
Ph: 515-382-2543  
Fax: 515-382-7171  
Toll Free: 1-888-522-9820



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

Work well. Play well. Live well.

## SHOULDER PAIN

*What causes shoulder problems?*

*How can physical therapy help you?*



*The shoulder joint is capable of a wider and more varied range of motion than any other joint in the human body. Unfortunately, because the shoulder is so flexible, it also tends to be unstable. And this instability contributes to a variety of problems, some of which can be treated with rest, and others which may require the expertise of a licensed physical therapist.*

## What Causes Shoulder Problems?

There are several factors involved in shoulder disorders:

- the aging process, including disuse and atrophy
- Strain and overuse
- Trauma
- Poor posture

It's not unusual for many of the common shoulder problems described below to result from a combination of these factors.

### THE AGING PROCESS

Whether you're 17 or 70, age has a profound impact on how the body responds to shoulder strain or trauma. As young people, the tissue around our shoulder joints is soft and resilient. Before age 30, if we "overdo it" through sports or physical labor, the most we're likely to suffer is a slight, short-lived soreness or stiffness in the tendons. This condition – tendonitis – is perhaps the most common of all shoulder problems. It rarely requires treatment in young people; as we enter middle age, however, the cumulative effects of years of tendonitis can result in much more serious ailments.

As we move into our 30s and 40s our muscles and tendons begin to undergo a structural weakening because of the aging process. By age 40 or 45, simple tendonitis can degenerate into actual tearing of the muscle tissue.

What's worse, each episode of tendonitis weakens the muscles further. Ultimately, this cumulative damage can lead to larger tears in the muscles and tendons. This is why conservative treatment of tendonitis at an early stage, along with education about the way the shoulder works and proper exercise, is crucial to preventing further (and more serious) injury.

### STRAIN AND OVERUSE

**Rotator Cuff Injuries:** Tears in the rotator cuff can result from the progressive worsening of tendonitis, repetitive strain through overuse, or trauma – especially as a result of athletics.

The gradual tearing of the rotator cuff is a process similar to a shirt wearing out – it gets more and more threadbare until the edges fray or a hole appears. This sort of rotator cuff injury can be difficult to repair surgically, and conservative treatment under the direction of a physical therapist is often the best course of action.

**Osteoarthritis** is a condition in which the joint cartilage deteriorates and the joint becomes gritty and rough. It can be caused by a number of factors, including disease, trauma, and infection.

Besides being painful, arthritis can lead to "frozen shoulder," which is the inability to fully move the arm due to tightness in the joint; attempts at movement in the later stages of the condition are usually painful. In advanced cases of arthritis involving the glenohumeral joint, arthroplasty – surgical replacement of the joint – is an option that can bring pain relief and greater mobility. The rehabilitation period, however, is crucial, with both the patient and the physical therapist playing active roles.

A **dislocation** is far more serious, involving tissue damage, stretching, and tearing. Unlike a subluxation, the shoulder doesn't "pop back in." The first step in treating a dislocated shoulder is almost always a trip to the emergency department. People under 20 and over 50 are most prone to dislocations, with younger individuals more prone to experience further dislocations in the future.

**Impingement** refers to a condition, sometimes painful, in which the shoulder joint lacks enough room to function properly. Structural impingement is a "built-in" organic condition, e.g., a bone spur in the shoulder joint. This situation is usually the result of years of tendonitis, rotator cuff injuries, and wear-and-tear. It is important to note that physical therapy cannot correct structural impingement; it's crucial that the patient consult with an orthopedic physician.

Functional impingements often result from occupational situations (such as being hunched over a computer keyboard all day). Brief stretching and exercise breaks, along with **proper posture**, can help prevent and alleviate functional impingement. Your physical therapist is specifically trained to help with this problem.

### TRAUMA

Trauma comes in two varieties: microtrauma and macrotrauma. Microtrauma is common in everyday life – it can occur while lugging an overstuffed suitcase, or straining to reach a can of spaghetti sauce on the top shelf or with repeat movements of the shoulder in a poor postural position. In both cases we're inflicting microscopic tears to the soft tissue around our shoulders. Although a single episode of microtrauma in itself is rarely serious, over time it can set the stage for shoulder ailments such as tendonitis, bursitis, and rotator cuff injuries.

Macrotrauma is the result of violent force, with falls and sports injuries being the most common causes. Depending on what position your arm is in when you fall or get hit, you can fracture your collarbone, dislocate your shoulder, or tear your rotator cuff.

## How Physical Therapy Can Help

Whether your condition requires a physician's care or not, a physical therapist will likely be involved in all phases of your shoulder's rehabilitation. If surgery is a possibility, the physical therapist will work with you before and after surgery to guide you through a program to help increase your strength, motion, and restore your shoulder mechanics.

**Exercise:** Proper posture, stretching and strengthening – is the key to preventing shoulder problems. If you already have a shoulder problem or pain, it would be wise to consult with a physical therapist before embarking on an exercise regimen. Beyond that, it's important to remember "exercise" is not a matter of high-tech weightlifting machines or "going for the burn." Remember, exercise is like medicine – in the right doses it can work wonders; in the wrong doses it can do more harm than good.

You don't need to become an expert in physical therapy to avoid or overcome injury, but you may need to learn some new habits or modify your physical activity, whether it involves work, recreation, or both.