

DEFINING COMMON MUSCLE AND JOINT INJURIES

By Dr. John A. Papa, DC, FCCP(OR)(C) - New Hamburg Wellness Centre

Physical injury to your **muscles** and **joints** can occur with workplace, household, sporting, and recreational activities. Common mechanisms of injury include slip and fall or collision-impact type accidents, overstretching a body part, twisting awkwardly, or performing repetitive movements. This can cause pain, stiffness, and swelling in a joint and/or muscle, leading to injuries such as **sprains**, **strains**, and **contusions**.

A **sprain** refers to a stretching or tearing of a ligament. Ligaments are tough bands of fibrous tissue that connect one bone to another. They help stabilize joints, preventing excessive movement. One or more ligaments can be injured at the same time. Common locations for **sprains** are the ankle, wrist, and knee joints.

A **strain** refers to a stretching or tearing of a muscle or tendon. Muscles are responsible for producing force and causing motion, whereas tendons are the tough fibrous extensions of muscle that attach to bone. A **strain** injury can occur when the muscle-tendon complex suddenly or powerfully contracts, or when it is overstretched. This is called an acute **strain**. Overuse of certain muscles over time can lead to a chronic repetitive **strain**. **Strains** are commonly referred to as “pulled muscles” or “tendinitis”. The shoulders, forearms, low back, and leg regions are common locations for **strains** to occur.



Contusions are commonly called “bruises”, and occur when small blood vessels in the skin, muscles, or bones are subjected to trauma.

Sprain, **strain**, and **contusion** injuries can exist on their own or in combination with each other. Initial conservative management and first aid of these injuries should follow the **P.R.I.C.E.** principle (**P**rotection, **R**est, **I**ce, **C**ompression, **E**levation). This can significantly reduce swelling, tissue damage, inflammation, muscle spasms, pain, and recovery time.

With a mild injury you should experience progressive improvement within 2 to 3 days. You may gradually begin using the injured area after this time. Mild injuries usually heal completely without any residual consequence in 1 to 4 weeks. Moderate injuries usually require 4 to 12 weeks to heal and may require basic rehabilitative treatment and exercises. Severe injuries will take longer to heal. Healing times may also vary depending on a person’s age, physical condition and general health.

You should seek immediate medical care under the following circumstances: a popping sound heard during the injury accompanied by a feeling of joint instability or inability to weight bear; obvious evidence or suspicion of a broken bone, fracture or joint dislocation; or injuries at risk for infection. For less serious injuries that do not subside, you should contact a licensed health professional who deals in the diagnosis and treatment of muscle and joint pain. They can determine the cause of your pain and prescribe appropriate therapy, exercises, and rehabilitation strategies specifically for your circumstance. For more information on managing muscle and joint injuries, visit www.nhwc.ca.



This article is a basic summary for educational purposes only. It is not intended, and should not be considered, as a replacement for consultation, diagnosis or treatment by a duly licensed health practitioner.