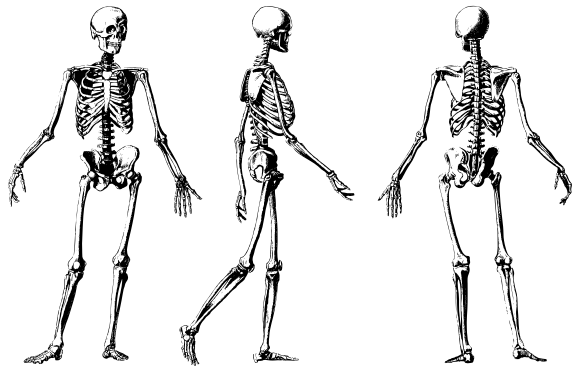
Cause:	Symptoms:	Treatments:	Determining Diagnosis
Cervical sprain/strain injuries are most often caused by excessive over-the-head activities or lifting, or trauma like a motor vehicle accident or a fall. Sharp, sudden increases in physical activity, stress on	Pain in the neck Swelling or redness at the neck Tenderness Muscle spasms Stiffness or difficulty moving the neck Headaches Radiates into Arm	Ice for first 24 hours, if pain persists call Fralick Chiropractic and schedule appointment. Appointments may or may not involve adjustment and physiotherapy depending on the injury severity, results of initial exam.	1. Thorough Physical Exam 2. Ortho/Neurological Exam 3. X-ray/MRI possible 4. Possible Referral 5. Possible Co-Treatment

SPRAIN/STRAIN

Grade I	Grade II	Grade III
Mildest form of the injury. Some fibers of the ligaments that surround the joint or joints will likely be stretched, but the joint will, for the most part, stay stable. You may experience mild to moderate pain, some swelling in the area and/or tenderness to the touch.	Considered moderate and consist of partial tearing and joint instability. Swelling and stiffness may ensue, and you'll likely get at least a bit black and blue in the area of the trauma. You won't be able to use the joint(s) as well as before; it's probably a good idea to downwardly adjust your activity levels	Very serious, often resulting in complete ligament rupture, loss of function and joint instability. The affected area will most likely swell up and become black and blue. This is called ecchymosis.



The cervical spine is the most mobile segment of the spine, but this mobility also makes it susceptible to strain and injury. Sprains and strains are soft tissue injuries. A strain affects muscles and tendons, while sprains affect ligaments. While these soft tissues provide reinforcement of the cervical vertebrae, they can be stressed and forced to the point of injury. Excessive flexion (bending forward) and extension (stretching out) activities, especially when combined with poor posture and movement mechanics, will lead to injury. A complicated system of ligaments and muscles serves to control movement, maintain posture, and support the head and neck. Ligaments are fibrous bands of soft tissue that attach bone to bone. The ligamentous system of the spine protects the intervertebral discs and spine from injury, and prevents excessive movement of the head and neck. The muscular system of the cervical spine is complex, and includes the deep erector spinae or paraspinal muscle groups that run parallel to the spine. In addition there are larger and more superficial muscles that help to move and protect the neck and head. When neck or spinal motion is pushed to the extreme, such as in a car accident or whiplash injury, these ligaments and muscles can be damaged. Ligament damage sprain and muscle damage strain can produce pain, soreness, loss of motion, and, if severe enough, joint instability. The term Cervical Sprain is used to describe the pain that sometimes occurs, following an acute injury to the soft tissue of the neck, including the ligaments, tendons and muscles. Irritation or injury of the structures of the spine may produce spasm and pain of the muscles of the head neck and shoulder area. Common muscles involved include the suboccipital muscles, trapezius, and sternocleidomastoid. Injury to the head and neck causing weakness or tightness of the muscles or laxity of the ligaments can result in pain, decreased ability to maintain good posture, limitation in movement and headaches.