

# Injury Management - My Aching Lower Back - Part I

A low back injury, what an awful thought. It probably happens more than you think. How many of us have experienced low back pain? I have on several occasions, and I even train my lower back weekly. No one is oblivious to it. I'm sure we've all experienced it. Strain something while lifting or twisting. It can even occur sneezing. Each step taken generates small twitches or twinges in the injured area. Lay down and it's hard to get up. Try bowling with an injured low back. You can't bend forward or straighten up, the arm swing is restricted, and how do you get down into the finish position. Painful!

Low back injuries have been found to be the most prominent medical problem in Americans 30-60. Across the age continuum, some 30 million Americans are impaired with low back complications. In lieu of its seriousness, how many of you engage in some type of low back conditioning program? I will go out on a sturdy limb and say very few.

## Design Of The Spine

Let's take a moment and look at the spine. The anatomical design and positioning of the spine allows for a high degree of mobility front to back, side-to-side, and left to right. The spine runs from the base of the skull (C1) to the end of the tail bone (coccyx). The spinal column, comprised of 33 bones or vertebrae, serves to provide for our posture and is more of a central base of support for many many things. The spine is a vital set of bones made up of seven cervical, 12 thoracic, and five lumbar vertebrae. As the spinal segments progress downward from the neck (cervical) region, they grow larger to accommodate for our upright posture. Each vertebra consists of a neural arch through which the spinal cord passes, and several projecting processes serve as attachments for muscles and ligaments. The low back, referred as the lumbar, is considered the foundation of the spine. The lumbar portion of the spine is composed of five vertebrae (L1-L5) and considered the major support of the low back.

## Back Pain And Bowling

Back afflictions are second only to foot problems in order of incidence throughout life. I previously revealed that lumbar problems are the most common work-related injury, and that still holds true today. In sport, back problems are relatively common and most often result from congenital conditions, mechanical problems, or traumatic factors. In bowling, the traumatic and sometimes mechanical factors are the primary causes of lumbar injuries.

- Congenital Condition - conditions present at birth.
- Mechanical Problem - faulty posture, obesity, or poor body (bowling) mechanics.
- Traumatic Factors - forces produced during movement or particularly sport resulting in contusions, sprains, and or fractures.

The lower back is tremendously taxed while we bowl.

- It supports the body's weight.
- It enables us to maintain stability and balance throughout the approach.
- It helps us exert and resist force swinging and throwing the ball.

Over the course of several games and many days of continuous bowling, the lower back becomes fatigued, taxed, drained of energy, and downright tired. This is when injury susceptibility is greatest.

## How It Happens

Here's how I've seen it, You are up at the counter or in the bathroom at the center - maybe the snack bar - you don't wear shoe covers or were too hurried to use them - it's your turn - rush back down to your pair - grab your ball, set and concentrate, go, then instantly STOP at the line, pulling back as a natural instinctive reaction or reflex. The back is wrenched, pulled, strained, hurt, and boy can you feel it - you don't let anyone see your pain - maybe you do, yet you still grab your ball and try to shrug it off to convert the washout you just left. Wrong move, for it only worsens the situation. At least for you it does. Sound familiar. It has happened to me. One occasion I was down for a good 3 days.

So what do you do? Let me rephrase that. What are you planning to do if you injure your lower back while bowling? Injury Management, the title, as it says, is a plan to manage and handle the injury. A plan that is clearly defined before and after the injury occurs. If you are a bowling instructor or a coach, this should be grabbing your attention. Every instructor needs an outlined plan for the most common bowling-related injuries. If a student incurs an injury under your care, you are somewhat liable. Legally, that hasn't been contested yet, in bowling at least, but morally and ethically you are obligated to offer some form or sort of guidance to the student. So, over the next three months, I want to give you some injury management guidelines for the three most common bowling-related injuries.

## **Lumbar Injury Management Guidelines (Preventive and Post-Trauma)**

### **Prevention - Ways To Minimize Your Risk**

**Tip 1 - Make yourself aware of the potential problems.** Don't minimize the importance of shoe covers. I'm not telling you to go out and purchase a pair, though some manufactures would like me to suggest. Be aware that your shoes are generally a primary cause.

**Tip 2 - Check your shoes each and every time you step onto the approach.** I like to slide mine a few times forward and backward as I'm waiting to step up. Just take a quick millisecond to check your shoes.

**Tip 3 - Warm up before you start bowling.** It may seem silly to some of you, but the first few minutes of bowling is usually when most injuries occur. Why - due improper warm up. In February's issue, I clearly outlined a bowling-specific warm up routine. Some have written saying they will never lay down on the floor to stretch out. Others of you have made a concerted effort to incorporate the warm up routine into your daily bowling. Either way, just know that a good warm-up before you bowl will minimize your risk of lumbar injury.

**The Most Important Tip - Exercise your back weekly to prevent an injury.** A person in good physical condition will generally reduce their risk of lumbar injuries. However, if your fitness level is sub par, the risk of your injury is nearly doubled, and even tripled if you bowl more frequently than average.

**Exercise has been found to be an effective means for preventing and treating low back injury enabling individuals to restore proper muscular balance and low back & hamstring flexibility.**

### **Post Trauma - If You Incur A Back Injury**

**Tip 4 - Recognize the severity of an injury and stop bowling immediately.** That means now and not after the game is completed. No pain no gain does not apply here. Minor joint sprains and muscle strains can easily be worsened with continued bowling or physical activity. When an athlete is injured, whether it is during practice or competition, attending to the injury is of immediate concern. We may not have athletic trainers on our sidelines, but we can take the necessary steps to deal with it ourselves.

**Tip 5 - Make a note when and how the injury happened, in case you need this information for a medical report.** Usually, a physician will inquire about the nature of the injury. When you visit one, make sure your recollection is clear and concise. This information allows the physician to more accurately diagnose your problem and prescribe treatment.

**Tip 6 - Alert the bowling center management.** Request an emergency report form be completed to document your injury. Always make the center management aware of your condition and situation.

**Tip 7 - Visit a physician for an evaluation.** Don't rely on your own medical knowledge; it's usually insufficient. Instead, let a trained medical provider evaluate and prescribe treatment for your injury. That's cut and dry. I know it may be expensive if you're living on a fixed income. I know you don't like to visit doctors because you wait forever in the waiting room. I know you don't think half of them know what they are doing and they overcharge -- but do it anyway. Be safe and secure, not sorry.

**Tip 8 - Rest, rest, rest.** The last thing you want to do when incurring a lumbar injury is stay active. If you continue bowling and other activities that directly innervate the back, then you are not telling the body you want it to heal. Instead, you are

sending the signal that you just don't care. I care about you and I want you to rest. Therefore, unless a physician tells you otherwise, rest and relax. Bed rest and time off from your activities will allow it to heal properly on your body's time frame.

## **Exercise To Improve Your Lower Back**

Many sport-specific conditioning programs usually include exercise to strengthen and condition the lower back. The Bowling-Specific Training Program does just that. You can obtain your copy online at <http://members.home.net/bowlfit/>. Lumbar fitness is an important, not to be neglected ingredient, when considering any type of training whether it is for work, school, sports, or just your quality of life. Try one of the two low back exercises provided, and begin to take an appropriate step to minimize your risk of lumbar injury.

**Lumbar Extensions** - lie prone (on your stomach) on the floor with the head relaxed in your hands. Lay the hands and arms under the chin to support the neck. Relax the stomach and lower back allowing free, unrestricted motion. Begin this exercise by slowly exhaling the air from your lungs and contracting the lower back muscles. Then, raise the upper torso off the floor by using the lower back muscles to pull upwardly. Once the furthest extended position is reached, hold for two seconds, then slowly lower the upper torso, under control, to the floor. As soon as the shoulders contact the floor, begin the next repetition.

**Back Extension Exercise Machine** - this is an exercise machine designed specifically for the lumbar extension. Begin by slowly and freely, with no resistance, producing the movement while acclimating oneself with the machine and exercise. When you have comfortably learned the movement, gradually increase the resistance to begin overloading the muscles. Perform one set of 10 repetitions very slowly using a 4-second by 4-second count for the movement.

Exercising your lower back is the best preventive measure taken to ensure minimizing risk of future lumbar injuries. Take the time to improve your fitness level using one of these two low back exercises and be, as Brunswick says, Proactive. Remember, BTM brings you current information pertaining to various methods athletes employ to enhance performance and manage injury. Become one of those athletes and show the bowling community your dedication and commitment to a healthy, happy lifestyle. Remember to consult your doctor or physician before beginning any exercise or activity program.