

**Chapter 15: Excerpt**  
**The Impact of Spinal Cord Injury on the Shoulder**  
MANAGING SPINAL CORD INJURY

MATT ELROD, DPT, MEd, NCS.  
ALISON LICHY, DPT, NCS

*"As an individual with a spinal cord injury, you will rely strongly on your arms and especially your shoulders, i.e. transfers, pressure relief, and general mobility. To avoid injuries to your shoulders, exercise that strengthens and maintains flexibility is crucial." Brenda J. Gilmore*

## **COMMON SHOULDER PROBLEMS**

There are many types of shoulder problems. Basically, a problem arises when there is a problem in any of the bones, muscles, tendons or ligaments mentioned above. Less commonly, problems arise because of nerve or blood-flow issues. Here we focus on muscle, ligament, and tendon problems because they are more commonly encountered after spinal cord injury.

## **SHOULDER PAIN**

If you have to depend on your arms to get out of bed, dress, do self-care, *and* get you where you want to go everyday, you are at risk of having shoulder pain. The good news is that most shoulder pain can be prevented. Pain in the shoulder typically occurs because of problems in the nerves, bones, muscles, ligaments and/or tendons.

## **WHAT CAN I DO TO PREVENT SHOULDER PAIN?**

As you work to maintain your shoulder health and prevent problem, be sure to:

- *Understand your body so you can recognize potential problems.* Develop a good understanding of how your shoulders work and what shoulder problems might arise, depending on your level of spinal cord injury.
- *Be proactive.* Take steps to prevent shoulder problems before they develop. Maintain good muscle balance, position your shoulders properly, and use appropriate assistive equipment. Doing so will prevent pain and allow you to continue doing activities you need to do or want to do.
- *Strengthen and stretch.* Make shoulder exercises a routine part of your life. Review the exercises provided in this chapter and talk with your physical

therapist or occupational therapist about which exercises are appropriate for you. Make sure you understand which muscles you are strengthening and why.

- *Avoid overuse.* Don't overdo exercises and other activities that could strain or injure your shoulder muscles.
  - *Deal with pain.* If you experience shoulder pain, talk with your doctor or therapist right away so you can resolve the problem and prevent injury.
- 

## **IMPORTANT POINTS TO REMEMBER**

- The shoulder is a very complex joint with many muscles that help with movement of the arm and shoulder. Different spinal cord injury levels can affect the muscle innervations and amount of possible strength in different shoulder muscles.
- Common shoulder problems among persons with spinal cord injury include shoulder pain, muscle imbalance, subluxation, and contractures.
- Exercises to maintain muscle strength and range of motion can help prevent shoulder problems and pain that might reduce one's ability to do activities of daily living. Maintaining a healthy weight and striving for good muscle balance, positioning, and posture can also avert shoulder-related problems.

*If you are interested in purchasing this book (\$16.95), please visit*

<http://www.nrhrehab.org/About+NRH/Publications/412.aspx>