# BACK PAIN BASICS

## COMMON QUESTIONS, UNCOMPLICATED ANSWERS

## About the North American Spine Society

The North American Spine Society (NASS) is the world's largest multidisciplinary organization that advances quality spine care through education, research and advocacy. NASS members are MDs, DOs and PhDs in 22 spine-related specialties including orthopedics, neurosurgery, physiatry, pain management and other disciplines. Nurse practitioners, physician assistants, chiropractors, physical therapists, practice administrators and other allied health care professionals involved in spine care also are represented.

## Why is a multidisciplinary approach to back pain so important?

Research shows that by combining a variety of treatment options to address an ongoing back pain problem, patients often have more positive results than with just one treatment method alone. A multidisciplinary approach may include treatment such as physical therapy, pain management (for example, medications, spinal injections and coping strategies), body mechanics/ergonomics and various forms of exercise including complimentary approaches like Pilates or yoga.

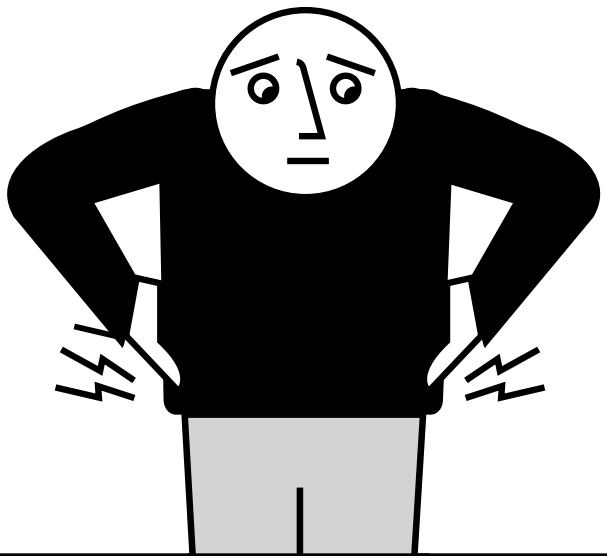
Sometimes back pain will resolve itself with one form of treatment, but not always. With a multidisciplinary treatment program, a patient may take advantage of multiple forms of treatment simultaneously with better results. The goal is to find the right combination of treatments to alleviate back pain, and most importantly—improve overall quality of life.

Finding the right treatment plan for you is the first step in managing your back pain. For more information on spine care or to find a spine specialist in your area, please go to www.spine.org or call (866) 960-NASS.

# BACK PAIN BASICS

## COMMON QUESTIONS, UNCOMPLICATED ANSWERS

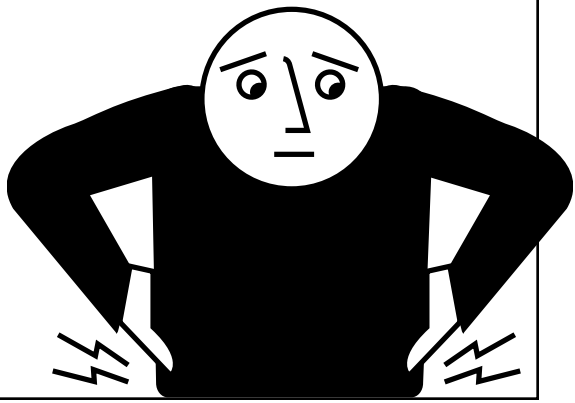
Back pain is no laughing matter. In fact, nearly everyone in their lifetime will suffer with some type of back pain. Because back and neck pain are such common complaints, it's no surprise that people have a lot of unanswered questions on the topic. This booklet briefly addresses some of the most commonly asked questions NASS members receive about back pain, its treatment and prevention.



## So…what exactly causes back pain?

Oh, my aching back! We've all said it at some point in our lives. As painful as it can be, the exact source of back pain is often difficult to identify or pinpoint. In fact, there are numerous possible pain producers including muscles, soft connective tissue, ligaments, joint capsules, cartilage, discs and nerves. Through everyday activities—exercise, lifting, playing a sport, etc.—these areas may be pulled, strained, stretched or sprained. Sometimes, small tears that occur in the outer layer of a spinal disc can result in severe pain. Many people experience pain from an abnormal disc that may be degenerating, bulging or even herniated. Even if the actual tissue damage is considered minor—and likely to repair on its own—the intensity of the pain might be quite severe.

There is often a chain reaction which contributes to a person's pain experience. In the body, numerous chemical substances are released in response to tissue irritation or injury. These substances "stimulate" the surrounding pain-sensitive nerve fibers, resulting in the sensation of pain. Some of these chemicals trigger the process of inflammation, or swelling, which also contributes to pain. The chemicals associated with this inflammatory process feed back more signals which perpetuate the process of swelling. The inflammation from this cycle of events may persist for days to weeks.



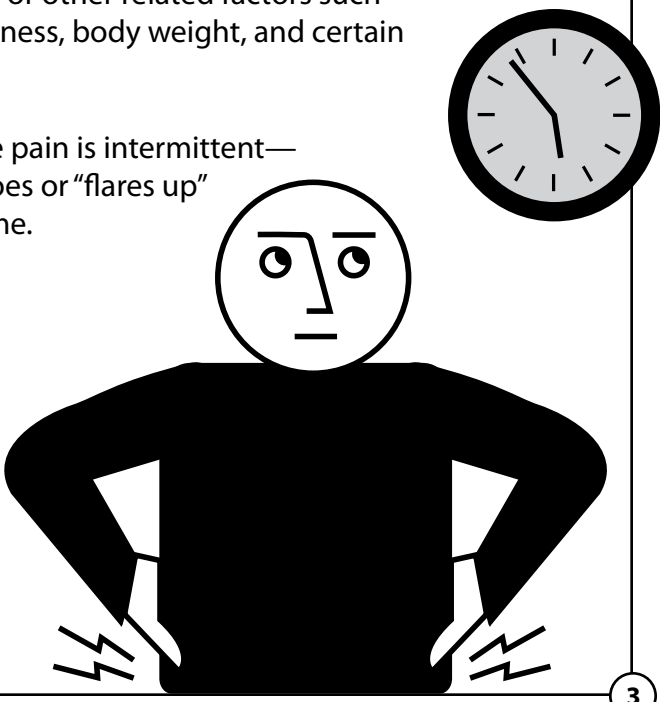
## How long does an episode of back pain typically last?

No matter how long it lasts, back pain isn't fun when it's happening to you or someone you love. Unfortunately, the duration and severity of a single episode cannot be predicted based on the onset, location of pain, or even the initial severity. There are three general categories of pain—acute, chronic and recurrent acute.

The good news is that even if the exact source of pain is not determined, usually acute pain subsides over a month or less as the back's irritated tissue heals. In general, nearly 80% of first time low back pain episodes resolve by six weeks.

Chronic pain is generally described as pain that lasts for months at a time and is often less correlated to tissue damage or injury and may be the result of a more long-term spine condition or other related factors such as muscle weakness, body weight, and certain life stressors.

Recurrent acute pain is intermittent—it comes and goes or "flares up" from time to time.

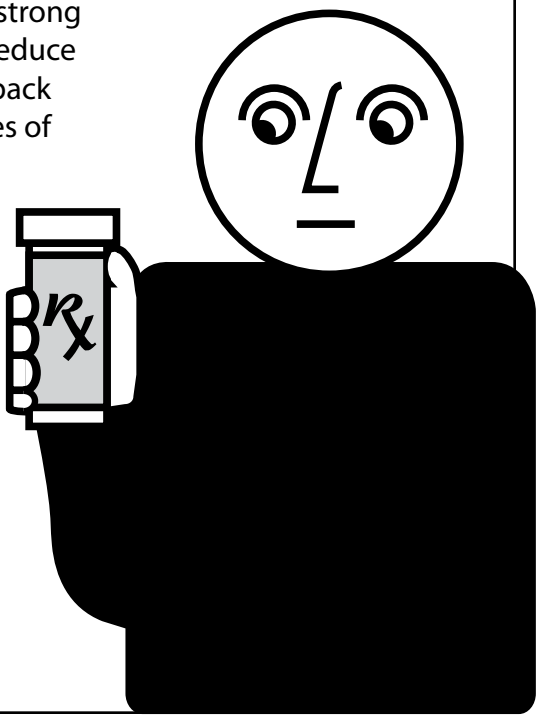


## What is the best pain relief medication for back pain?

A third of Americans rely on over-the-counter medications like acetaminophen and nonsteroidal anti-inflammatory drugs or analgesic pain relievers to reduce swelling and aches associated with back pain. These types of medications prove to be very effective in reducing symptoms and providing comfort.

The NASS "Back Pain in America" survey found that one in five people rely on prescription medications under the care of their doctor to treat their back pain. Despite the name, muscle relaxants are medications that don't actually relax skeletal muscle. What these drugs do is calm or sedate the central nervous system and can be also useful to facilitate sleep and reduce contributing emotional or muscular tension associated with severe back pain.

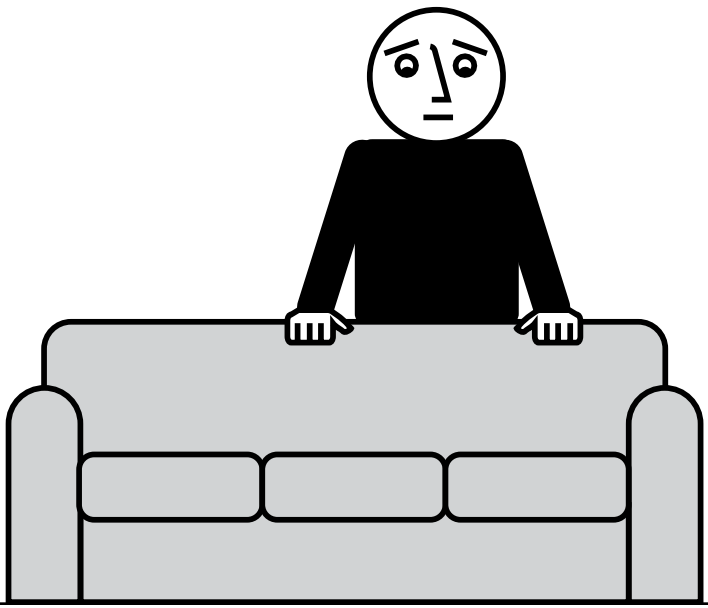
Narcotics or opioids are strong pain relievers and help reduce the symptoms of acute back pain. Because these types of drugs are sedatives, they also can be useful in facilitating sleep during the first few nights after the symptoms first occur. These medications should be used only as prescribed by a physician.



## When I'm experiencing back pain, should I lay flat and rest my back?

Actually, some of the best advice for treatment of acute back pain is to get out of bed and remain as active as tolerated. Continuing to perform everyday activities may seem counterproductive, and the natural inclination may be to stay on the sofa and avoid activity. Yet, activity may be exactly what you need to keep blood and nutrients flowing to the affected area, inhibiting inflammation and reducing muscle tension.

Many people who suffer from back pain find that they can perform their usual, but more controlled cardiovascular activities—such as walking—in spite of the pain, and often feel better as a result. More vigorous or uncontrolled activities such as weight lifting, competitive or contact sports are not recommended when the pain is severe. Consult with your physician before returning to these types of activities.



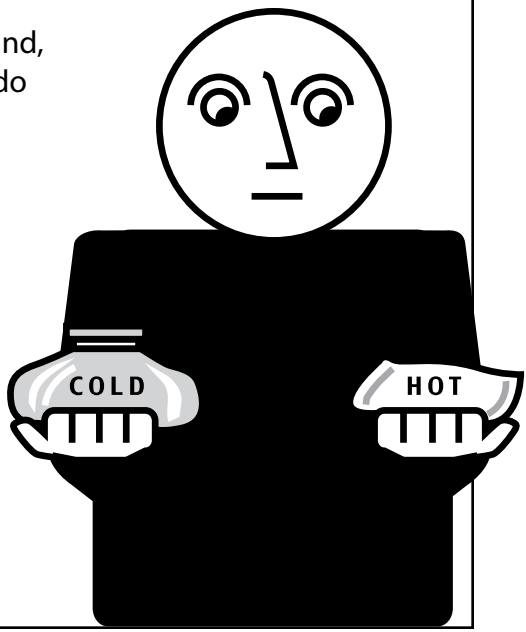
## Should I ice or heat a sore low back?

This is probably one of the most commonly asked questions about treatment of back pain. Both ice and heat can help in alleviating pain, but it's important to know when to use them.

Ice reduces inflammation or swelling by decreasing blood flow from constricted blood vessels. Placing an ice pack on the area shortly after the pain begins (within 48 hours) can help with pain relief. Apply an ice pack to the affected area for up to 20 minutes every two hours, but remember to protect your skin from frostbite by using a thin sheet or towel.

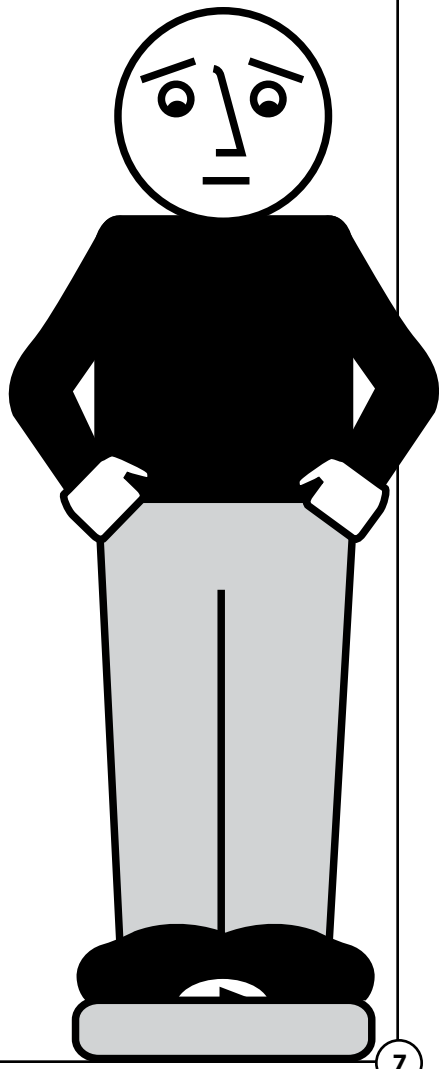
Local application of heat or ice can temporarily reduce back pain and heat may facilitate stretching. Heat also is good for soothing sore back muscles, especially after the initial 48 hours has passed. Either dry heat (such as an electric heating pad) or moist heat (such as a hot bath or steamed towels) can be used.

It is important to keep in mind, however, that ice and heat do not necessarily speed long-term recovery.



## Does my weight matter much in relation to my back pain?

Your personal fitness will contribute to the overall health of your spine and weight control is an important component to maintaining a healthy back. Keeping on additional weight, especially in the mid-section or stomach, shifts your entire center of gravity forward and puts additional unneeded strain on your back muscles and surrounding tissues. We recommend keeping within 10 lbs. of your ideal weight to avoid experiencing unnecessary back pain or related issues.



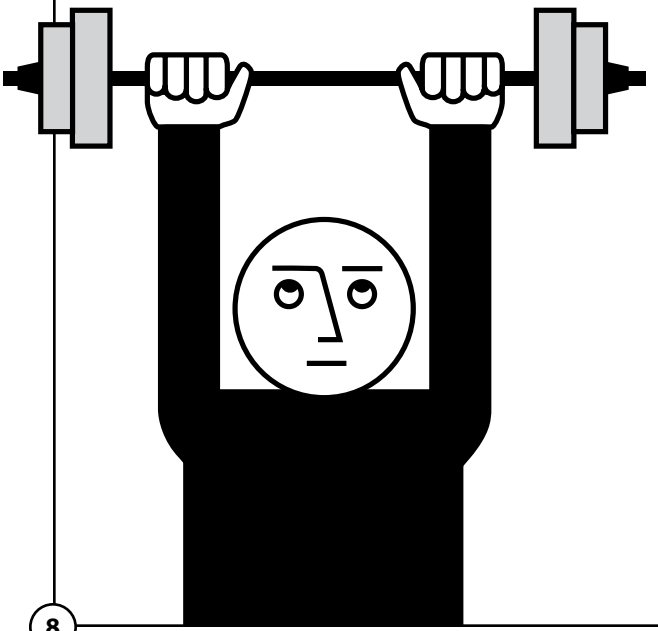
However, it is also possible to be too thin. Extreme thinness can be accompanied by low bone mass, putting you at risk for osteoporosis. The best advice is to eat a well-balanced diet in moderate quantities and exercise regularly to keep your weight in check.

## What is the best type of exercise to alleviate and prevent back pain?

Exercise is one of the most important treatments that your doctor will recommend to reduce back pain. Regular strengthening (core strengthening and resistance or weight training), flexibility (stretching) and aerobic exercise (three to five times per week) will improve your overall fitness and reduce further likelihood of back injury.

Many doctors and specialists provide their patients with proper exercise techniques to alleviate symptoms and prevent further back pain episodes from occurring. When exercising, follow these simple rules:

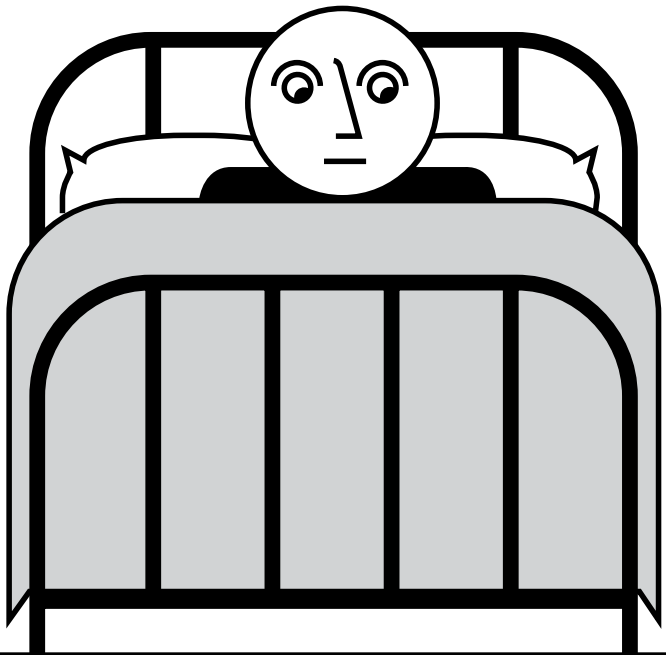
- Do each exercise slowly.
- Start with five repetitions of each exercise, and work up to 10 repetitions.
- Always remember to begin and end your exercise sessions with stretching.



## Does my sleeping position and mattress choice matter in avoiding back pain?

Many people don't realize that sleeping on your back puts 55 lbs. of pressure on your spine—but simply placing a couple of pillows under your knees cuts the pressure in half. Lying on your side with a pillow between your knees also reduces the pressure on your low back.

There are a wide variety of choices today when it comes to selecting a mattress. Mattresses and box springs work together to provide support for your body while you sleep. You can find mattresses with varying levels of firmness, innerspring options, etc. There is not a single type of mattress that works for everyone. We recommend trying several in the store before making a purchase—many companies offer a trial period so you can sleep on a new mattress for up to a month to ensure you're comfortable and pain free.



## What is the proper posture to avoid injuring my back?

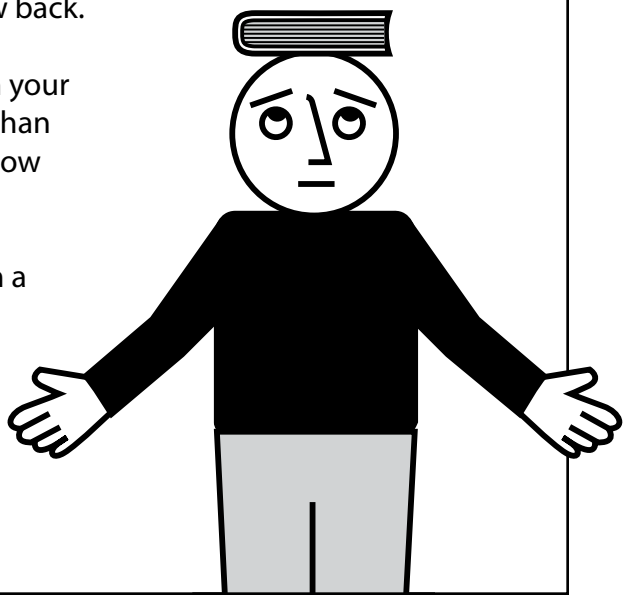
As a child, you probably heard a parent or teacher tell you to "stand up straight!" Simple as it sounds, maintaining proper posture is an important way to keep the many intricate structures in the back and spine healthy and help reduce the incidence and levels of back and neck pain. Not maintaining good posture and adequate back support can add strain to muscles and put stress on the spine. Over time, the stress of poor posture can change the anatomical characteristics of the spine, leading to the possibility of constricted blood vessels and nerves, as well as problems with muscles, discs and joints. All of these can be major contributors to back and neck pain.

Follow these simple guidelines to avoid injuring your back while performing these common activities:

Standing—Keeping one foot forward, with knees slightly bent, takes pressure off your low back.

Sitting—Sitting with your hips slightly higher than your knees reduces low back strain.

Reaching—Stand on a stool to reach things that are above your shoulder level.



## What are the proper ways to move heavy objects and lifting techniques to avoid injuring my back?

Lifting and bending are often major culprits when it comes to the onset of back pain. Using proper lifting and bending techniques will help reduce stress on the lower spine and help eliminate injuries. Follow these tips:

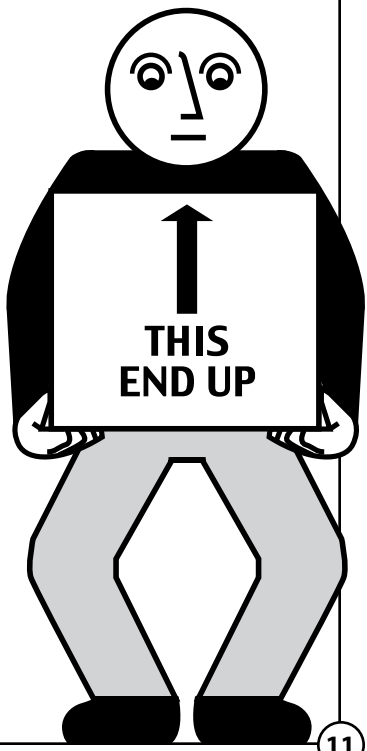
Use your legs—When bending and lifting, make sure to bend your knees so that your legs help distribute the weight more evenly. Squat with your chest sticking out forward and your buttocks protruding out backward. This position keeps your lower back in a neutral, safer position.

Keep the weight close—When you lift and carry a heavy object, keep the weight as close to your body as possible.

Balance your load—Two smaller objects (one in either hand) may be easier to carry than one large one and also reduces the stress on one side of the body.

Avoid twisting—A surefire way to harm your back is by twisting when lifting an object because it puts too much pressure on the structures of the lower back.

Push instead of pull—Pushing is much easier on your back than pulling. Use your arms and legs to start the push. If you must move a heavy item, don't do it alone—get someone to help you.

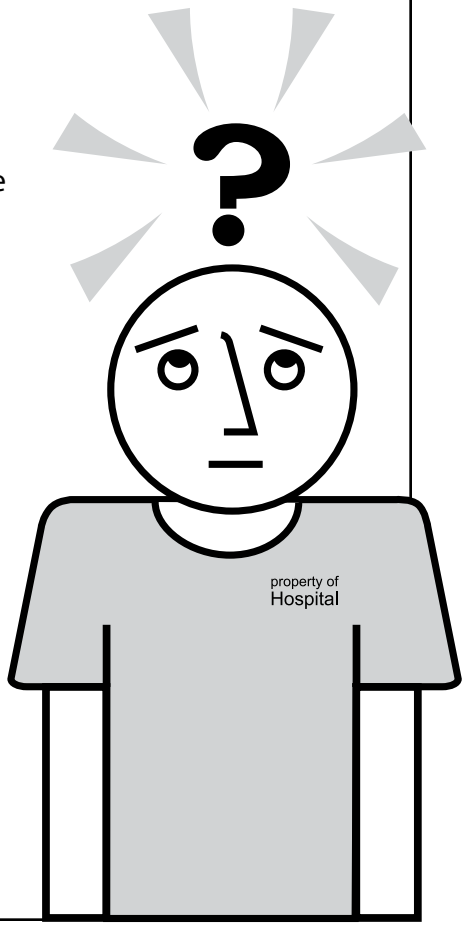


## If I have chronic back pain, would it be better to have surgery?

There is no simple answer to this question. Treatments for chronic back pain will vary depending on the type and source of the back pain. If a treatable source of the pain is found, then the underlying process can be addressed. When the underlying cause is either not specifically identifiable or not amenable to treatment, then the symptoms are treated. The goals of the treatment are to reduce pain, improve quality of life and increase function.

There are several different general categories of treatment recommended for chronic back pain. They include physical therapy, medications, coping skills, procedures and alternative medicine treatments. Your treating physician should tailor a program involving a combination of these options to address your needs.

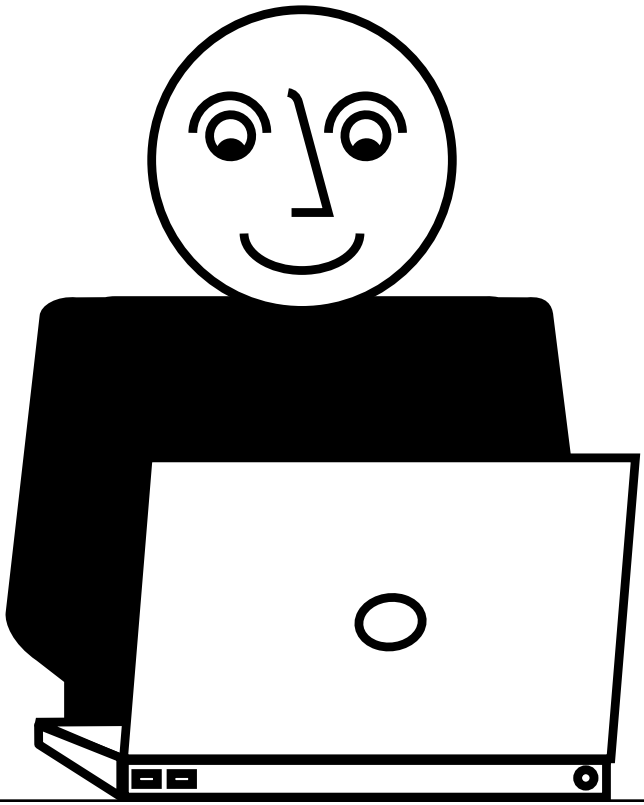
Actually, 90% of the care NASS members provide is non-surgical. We have found that only 1% of back pain sufferers need surgery.



## How do I choose a specialist to treat my back pain and which type of specialist is best?

A NASS survey revealed that more than half of the responders with back pain turned to a back or spine specialist such as a chiropractor, physical therapist, physiatrist, orthopedic surgeon or neurosurgeon for treatment. Your primary care physician should be helpful in pointing you to the most relevant specialist for your back pain. Each care plan is then tailored to the individuals' specific medical needs.

For more information on spine care or to find a spine specialist in your area, visit www.spine.org or call (866) 960-NASS.



## Consumer resources from the North American Spine Society

For additional information on back pain, conditions and treatments, go to **www.spine.org**.

### Test Your Back Knowledge

- Know Your Back!
- Back Quiz for Women
- Seven Back Pain Warning Signs
- Back Pain Risk Scale

### Prevention and Spine Health Maintenance

- Ten Tips for a Healthy Back
- Back Pain in Pregnancy
- Exercises for a Healthy Back
- Strength Training for the Elderly

### Specific Spine Conditions and Treatments

- Bone Graft Alternatives
- Cervical Spinal Stenosis
- Discography
- Electrodiagnostic Testing
- Herniated Cervical Disc
- Herniated Lumbar Disc
- Lumbar Spinal Stenosis
- Lumbar Zygapophysial (Facet) Joint Injections
- Magnetic Resonance Imaging (MRI)
- NSAIDS
- Open Discectomy
- Osteoporosis
- Postprocedural Discitis
- Radiographic Assessment for Back Pain
- Spinal Fusion
- Spinal Injections
- Spondylolisthesis
- Stingers
- Treatment of Young Athletes
- Whiplash & Whiplash Associated Disorders

### New Technologies

- Artificial Discs
- Bone Morphogenetic Protein
- Intradiscal Electrothermal Therapy (IDET)
- Percutaneous Vertebral Augmentation

### Patient Safety

- Patient Safety: Tips to Help You Safeguard Your Health
- AHRQ Patient Fact Sheet: Five Steps to Safer Health Care
- AHRQ Patient Tip Sheet: How to Protect Yourself and Your Family from Medical Errors!

**About the Contributing Editors**

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**Stuart M. Weinstein, M.D.** is a board certified physiatrist (a specialist in Physical Medicine and Rehabilitation). Dr. Weinstein is currently a full-time clinical faculty member at the University of Washington in Seattle, WA, and holds the rank of professor in the Department of Rehabilitation Medicine with joint appointments in the Departments of Orthopaedic Surgery and Sports Medicine, and Neurological Surgery. His medical practice primarily focuses on the management of spinal and other musculoskeletal conditions without surgery, with a particular interest in spinal problems in athletes and exercise therapies for back pain. He is an active member of the North American Spine Society and is currently a member of the Board of Directors.

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