



A RESOURCE FOR PATIENTS

Eighty to 90 percent of people in the United States will suffer from back pain at some time during their lives. Back pain is the second most common reason people visit their family doctors. On any given day, almost 2 percent of the entire United States workforce is disabled by back pain. It is the cause of enormous healthcare expenses.

USING THIS GUIDE

Please refer to this guide as you examine your treatment options. Remember, it is your right as a patient to ask questions and seek a second opinion.

Each year, patients from around the world turn to Cleveland Clinic's Neurological Institute's Center for Spine Health and Anesthesiology Institute's Department of Pain Management for specialized treatment of spinal disorders. Some 16,000 adults come to our Center for Spine Health for relief from common complaints such as low back pain and sciatica (leg pain) as well as complex conditions such as spinal deformity, stenosis and tumor. In addition, our Department of Pain Management, one of the nation's largest and most experienced, treats more than 10,000 new patients each year. The pain management fellowship training program is the largest of its kind in the country.

Specialists in both areas are dedicated to restoring function and relieving your pain to the maximum extent possible. Whether your goal is getting back to sports, work or hobbies, or just enjoying life, Cleveland Clinic spine and pain management specialists can help.



WHEN TO SEE A BACK PAIN SPECIALIST

Many back disorders can be evaluated and treated successfully by a primary care doctor. However, for severe or persistent pain, evaluation by a medical spine or pain management specialist is recommended. Warning signs that should prompt urgent medical evaluation include the presence of fever, worsening pain, progressive movement of the pain from the back into the leg, numbness in the area of the injury or down the leg, presence of a lump or area with an unusual shape, and pain that is unrelieved at rest or disturbs sleep.

What are the Types of Back Pain?

The most common types are:

- **Acute back pain**, a brief episode of pain that comes on suddenly. Most acute back pain is due to mechanical causes, such as a strain or sprain, in which pain radiates from the spine and its supporting structures. The pain may spread to the buttocks, thighs or knees, and many sufferers also experience spasms. Mechanical back pain is generally more noticeable when flexing the back or lifting heavy objects.
- **Chronic, persistent back pain** When back pain persists beyond four to six weeks, further medical evaluation is required. This pain is often related to the spinal joints, discs or supporting muscles of the back. In rare cases, cancer or an infection is found.



Gordon Bell, MD
Director, Center for Spine Health
Neurological Institute



WHAT ARE THE CAUSES OF LOW BACK PAIN?

The back is a complex structure of bone and muscle, supported by cartilage, tendons and ligaments and fed by a network of blood vessels and nerves. The back – especially the lumbar, or lower, back – bears much of the body’s weight during walking, running, lifting and other activities. It makes sense, then, that injuries to the lower back – such as strains and sprains – are common.

A common cause of low back pain is overstretched or injured muscles that support the lower back. Muscles and connective tissues can be injured from incorrectly lifting or carrying heavy objects. Muscles in the back or abdominal muscles can also become weak from lack of exercise. Engaging in sports that involve pushing and pulling – such as weightlifting and football – may increase the risk of a low-back injury. Other causes of low back pain include:

- Poor posture
- Standing or sitting in the same place for a long time
- Being significantly overweight
- Smoking
- “Slipped” disc, caused when a disc between vertebrae bulges past the bones and presses against a nerve
- Osteoporosis (thinning of bone)
- Osteoarthritis, a breakdown of the tissues or bones of the joint
- Fibromyalgia, an illness that causes achy, tender muscles, among other symptoms
- Trauma from injury due to an accident or fall that causes a fracture or muscle strain
- Serious illnesses such as cancer or infection (this is rare)

Prevention is the most important management technique. Controlling the factors you can control may help you avoid or recover quickly from back problems.



Dr. Richard Rosenquist,
Chairman, Department of
Pain Management

Back Pain and Sciatica

Pain that affects primarily the back should be distinguished from a spinal condition that results mostly in leg pain, a disorder commonly called sciatica. Typically, sciatica is the result of a “pinched nerve” in the spinal column. In most cases, the cause of sciatica is clearly defined; for example, a disc problem or arthritis. The cause of an episode of back pain, on the other hand, often is more difficult to pinpoint.

DIAGNOSING BACK PAIN

A careful evaluation of your medical history and a physical examination will help your healthcare provider determine the cause of your back pain. He or she will then work with you to create an appropriate treatment plan.

Your doctor may ask a series of questions to help identify possible causes of the pain. These questions may focus on lifestyle factors, when your pain began, where your pain is located, what effect it has had on your daily activities, and whether your pain has responded to any treatment. The doctor also will ask about your medical, surgical, family and social history.

Mild strains and sprains can usually be diagnosed based on a medical history – including a review of the method of injury and the symptoms – and a physical exam. In cases of more severe back pain, an X-ray may be taken to rule out a fracture or herniated disc. If your symptoms or the examination suggest the possibility of infection, malignancy or a pinched nerve, additional tests may be needed. However, X-rays, MRI/CT scans, EMGs and lab tests are necessary in only a small number of cases.

The Mind-Body Issue

The mind and body often work together in shaping our experiences. Sometimes, psychological factors can reduce or eliminate the effects of physical problems. In most cases, chronic back pain is a psychosomatic (“mind-body”) condition in which a real physical problem exists, but psychological factors play a large role in determining the person’s experience of that problem. In some cases, mental processes such as dependence, depression or frustration may make the pain worse; in other cases, a positive attitude and a sense of independence may lessen the pain.





TREATING BACK PAIN

Conservative Care

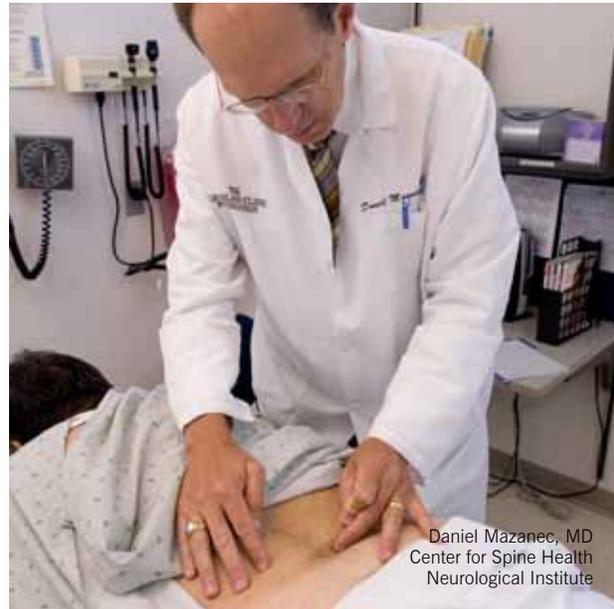
Many people diagnose their own back pain based on experience, and treat the pain with over-the-counter medications and rest. Fortunately, most back injuries will heal with this conservative approach.

For patients who do not improve quickly, Cleveland Clinic physicians will first explore nonsurgical treatment options for back pain. For moderate-to-severe strains and sprains, the treatment often occurs in two phases. The first phase, to reduce pain and spasm, may involve rest and the use of ice packs and compression (pressure), especially for the first 24 to 48 hours following an injury. An over-the-counter nonsteroidal anti-inflammatory drug such as ibuprofen (Motrin®) may be recommended to help reduce pain and swelling.

For the second phase, patients are encouraged to return to a near-normal schedule to promote rapid recovery from back pain. Most people experience a full recovery within two weeks. If symptoms continue for more than two weeks, additional treatments may be required.

Interventional Treatments

For some patients, a prescription pain medication and physical therapy are enough to control the pain. Rapid healing can be significantly enhanced through physical therapy, which focuses on the structures that support the spine. It is important to work with a spine-oriented physical therapist trained in an exercise approach. Most exercise programs can be performed at home without special equipment. The therapy will shorten recovery time and return you to work and leisure activities as quickly as possible.



Daniel Mazanec, MD
Center for Spine Health
Neurological Institute

But for a small percentage of patients, back pain remains chronic, persistent and disabling. For these people, more intensive treatment may be needed. Cleveland Clinic specialists offer the latest treatments and technologies for back pain, including:

- Nerve blocks and injections
- Radiofrequency ablation
- Intradiscal ablation
- Tunneled epidural catheters for continuous infusions
- Spinal cord stimulators
- Minimally invasive disc decompression
- Intraspinous drug pumps
- Osteopathic manipulation
- Acupuncture

PRUDENT PRESCRIPTION ADVICE

Families, friends and neighbors are often a source of advice on treating back pain. However, it is important to realize that everyone is different and it is never safe to take someone else's medication. Always contact your healthcare provider before taking any medication that is not prescribed specifically for you.



“When I woke up after the surgery, I realized the pain was gone, and the pain is still gone.”

– Phyllis Hendricks, 78, who underwent kyphoplasty after a fall left her with a broken vertebra. Samuel Samuel, MD, of Cleveland Clinic Pain Management performed the procedure.

SURGICAL TREATMENT

For some patients, surgery may be the only possible solution to alleviate back pain. Although spinal surgery is often delicate and complex, our surgeons have one of the highest success rates in the country for even the most complicated procedures. They also can offer the latest minimally invasive techniques, when indicated, which result in less postoperative pain and faster recovery.

In the hands of a skilled, experienced surgeon, the benefits of surgical treatment usually far outweigh the risks. The most common surgical conditions are degenerative spine conditions such as disc herniation and spinal stenosis, followed by spinal deformity such as scoliosis and kyphosis, fracture/trauma and spine tumor. Whatever your diagnosis, our specialists apply their knowledge and skill, combined with the latest techniques and advanced technologies, to relieve your pain and restore your function to the highest degree possible.

SPINE CONDITIONS TREATED AT CLEVELAND CLINIC

Cleveland Clinic has experts to treat these and other back and neck conditions:

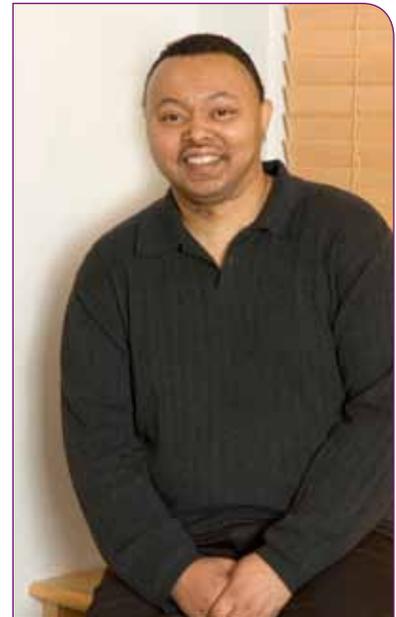
- Degenerative back and neck disorders
- Disc herniation
- Spinal deformities, including scoliosis and kyphosis
- Spinal fracture
- Spinal stenosis
- Spinal tumor
- Spondylosis/spondylolisthesis
- Chiari malformation



KEEPING YOUR BACK HEALTHY

It is not possible to prevent all back injuries, but you can take some simple steps to help lower the risk of a sprain or strain. Here are some “back-saving” tips:

- Eat a healthy, well-balanced diet to keep your bones and muscles strong.
- Maintain a healthy weight. Excess weight puts added stress on the structures of the lower back.
- Exercise regularly, including stretching, to keep your joints flexible and your back and abdominal muscles strong.
- Choose activities and sports, such as swimming and biking, that do not place your lower back at risk of injury.
- Use good body mechanics when sitting, standing and lifting. Try to keep your back straight and your shoulders back. When sitting, keep your knees bent and your feet flat on the floor. Don't over-reach, and avoid twisting movements. When lifting, bend your knees and use your strong leg muscles to help balance the load.
- Maintain good posture. If you start to feel sore or stiff, change your posture and modify your body mechanics. Your body will warn you, using pain as a signal, when your mechanics are improperly aligned.
- Practice safety measures to help prevent falls, such as wearing shoes that fit properly and keeping stairs and walkways free of clutter.
- Don't smoke. Nicotine interferes with blood flow to the muscles.



“The next day, I felt the best I had in four years.”

– David Marshall Jr., OD, PhD, a Center for Spine Health patient, noting that his spinal stenosis surgery relieved him of much of the pain associated with reflex sympathetic dystrophy (RSD), a progressive nerve disorder that can lead to crippling and permanent damage. Edward Benzel, MD from the Center for Spine Health performed the procedure.

CLEVELAND CLINIC
DEPARTMENT OF PAIN MANAGEMENT



When chronic back pain disrupts your quality of life and does not improve with standard treatments such as aspirin and ibuprofen, Cleveland Clinic's Department of Pain Management is here to help. Many safe, proven, effective treatments are available to eliminate or reduce chronic back pain. The sooner you seek treatment, the sooner you can start enjoying life again.

Our board-certified physicians are dedicated to the goal of helping people with chronic pain return to a normal, productive lifestyle. Using the latest in diagnostic technology, paired with medical and interventional therapeutics, they will work with you to identify the source of your back pain, eliminate or reduce the pain, and teach you to manage it.

To make an appointment with a Cleveland Clinic Pain Management specialist, call 216.444.PAIN (7246) or toll-free 800.392.3353, or visit clevelandclinic.org/painmanagement for further information.

Among the conditions our specialists treat are:

- Back and neck pain, including herniated discs, spinal stenosis, tumors and arthritis
- Chronic abdominal pain and pelvic pain
- Complex regional pain syndrome (also known as reflex sympathetic dystrophy or RSD)
- Muscle and joint pain
- Headache
- Sports injuries
- Disorders of the nervous system, including shingles and trigeminal and occipital neuralgia (facial pain)
- Pain associated with AIDS
- Sickle cell anemia
- Cancer pain
- Intractable spasticity associated with multiple sclerosis or spinal cord injury
- Pain associated with osteoporosis and vertebral compression fractures

Our staff is acclaimed for its research and education in pain management. Patients who qualify have the opportunity to participate in clinical trials seeking better, more effective treatments for managing pain. Our physicians regularly publish in leading medical journals and are invited lecturers at medical education seminars across the country and around the world.



CLEVELAND CLINIC CENTER FOR SPINE HEALTH

The Center for Spine Health's multidisciplinary team brings together the expertise of nationally recognized Cleveland Clinic specialists in orthopaedic surgery, neurosurgery and medical spine, offering patients with back and neck pain the latest, most innovative and effective medical and surgical treatments.

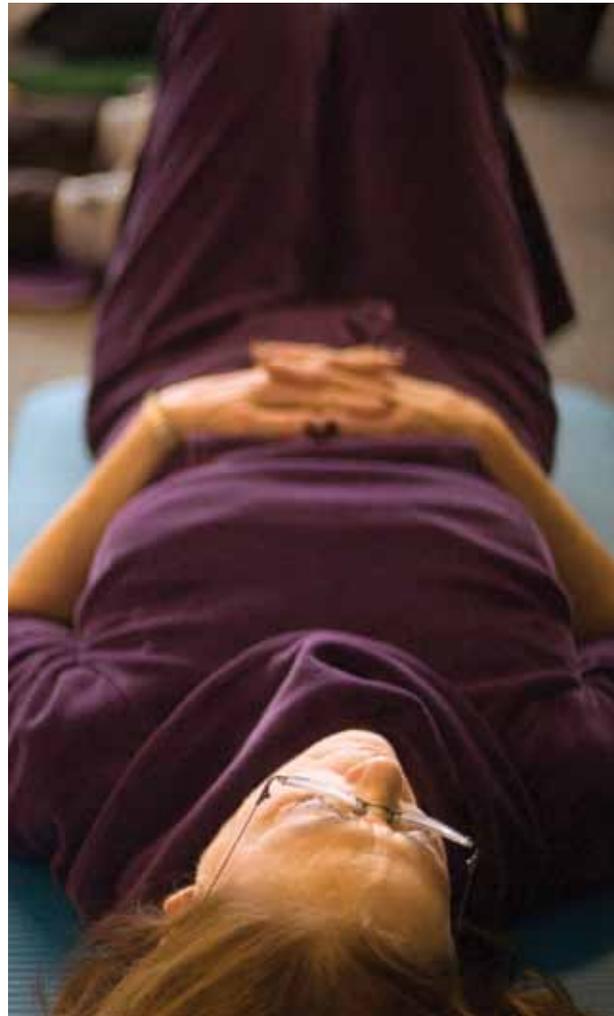
The Center for Spine Health integrates research, clinical practice and education, with the goals of improving patient care, developing unique technologies and subspecializations, and promoting cross-fertilization of ideas among staff.

From periodic monitoring to intensive surgical correction, we provide state-of-the-art management for back and spine problems. Among the many therapeutic options we offer are:

- Spine surgery
- Mature spine care
- Spine wellness
- Spine injury prevention
- Interventional spine therapies
- Rehabilitation and physical therapy

The Center for Spine Health is located on the main Cleveland Clinic campus and at Lutheran Hospital. Many of our specialists also see patients at Cleveland Clinic family health centers, which are conveniently located throughout northeast Ohio.

If you require surgery, it will be performed at the Cleveland Clinic main campus or Lutheran Hospital. (In some cases, there is an option for surgery at Hillcrest Hospital). You may be able to schedule your pre- and postoperative appointments at one of our convenient community locations (see page 11 and back cover).



To make an appointment with a Cleveland Clinic Center for Spine Health specialist, call 216.636.5860 or toll-free 866.588.2264, or visit clevelandclinic.org/spine for further information.

LIVING WITH BACK PAIN

In some circumstances, back pain will persist and the individual will need to learn to manage it long term. The Chronic Pain Rehabilitation Program is an intensive, three- to four-week treatment and education program that targets patients who are devastated by their pain. The program's services include physical and occupational therapy, coping skills training, medication management and psychotherapy to reduce negative emotions that result from and worsen pain.

Patients may be referred to the program by a physician, though a referral is not necessary. For same day appointments or more information call 216.636.5860 or toll free, 866.588.2264.

Here are some tips for living with persistent, chronic back pain:

- **Medical compliance** If patients are to live with their pain long term, it is important that they take their medication as prescribed. By relieving pain symptoms, medications can facilitate an active, exercise-oriented rehabilitation program.
- **Physical conditioning** This is particularly important for chronic pain patients. Carrying excess weight, smoking tobacco and drinking alcohol will exacerbate chronic pain. Active, exercise-oriented physical therapy is the cornerstone of treatment.
- **Stress reduction** Stress makes pain worse. Not all stress is avoidable, but reducing or eliminating sources of persistent stress, where possible, will help in reducing the overall experience of pain.
- **Interpersonal support** It is natural for others to become frustrated with a person's chronic pain and complaints. The patient needs to make a special effort to foster and maintain social support.
- **Activities** One of the best strategies for living with chronic pain is distraction. It is important for



self-esteem to maintain some work role if possible, establish a clear role in the family, take on regular interpersonal duties, and maintain hobbies or personal interests.

- **Pain reduction techniques** Psychological approaches such as yoga, biofeedback and self-hypnosis are helpful in reducing chronic pain.

**CLEVELAND CLINIC CENTER FOR SPINE HEALTH LOCATIONS****Main Campus**

9500 Euclid Ave./S7
Cleveland, OH 44195
216.636.5860
866.588.2264

Beachwood Family Health and Surgery Center

26900 Cedar Road
Beachwood, Ohio 44122
216.839.3000

Broadview Heights Family Health Center

2001 E. Royalton Road
Broadview Heights, OH 44147
216.636.5860

Fairview Hospital 18099 Lorain Ave.

Cleveland, Ohio 44111
216.476.7000

Hillcrest Hospital

6780 Mayfield Road
Mayfield Heights, OH 44124
216.636.5860

Lakewood Hospital

14601 Detroit Ave.
Lakewood, Ohio 44107
216.521.4400

Lorain Family Health and Surgery Center

5700 Cooper Foster Park Road
Lorain, Ohio 44053
440.204.7400

Lutheran Hospital

1730 W. 25th St.
Cleveland, OH 44113
216.636.5860

Marymount Hospital

12300 McCracken Road
Garfield Heights, OH 44125
216.581.0500

Medina Hospital Medical Office Building

970 East Washington St.
Medina, Ohio 44256
330.721.5700

Richard E. Jacobs Health Center

33100 Cleveland Clinic Blvd.
Avon, Ohio 44011
440.695.4000

Solon Family Health Center

29800 Bainbridge Road
Solon, OH 44139
216.636.5860

Strongsville Family Health and Surgery Center

16761 SouthPark Center
Strongsville, OH 44136
216.636.5860

Twinsburg Family Health and Surgery Center

8701 Darrow Road
Twinsburg, OH 44087
330.888.4000

Willoughby Hills Family Health Center

2570 SOM Center Road
Willoughby Hills, OH 44094
216.636.5860

Wooster Family Health Center

1740 Cleveland Road
Wooster, OH 44691
330.287.4500

CLEVELAND CLINIC PAIN MANAGEMENT LOCATIONS**Main Campus**

9500 Euclid Ave./C25
Cleveland, OH 44195
216.444.PAIN (7246)
800.392.3353

Ashtabula County Medical Center

2420 Lake Ave.
Ashtabula, OH 44004
440.997.6700

R.E.Jacobs Health Center in Avon

33100 Cleveland Clinic Blvd.
Avon, OH 44011
440.695.4000

Beachwood Family Health and Surgery Center

26900 Cedar Road
Beachwood, OH 44122
216.839.3000

Broadview Heights Pain Management Center

2001 E. Royalton Road
Broadview Heights, OH 44147
440.717.6125

Chagrin Falls Family Health Center

551 E. Washington St.
Chagrin Falls, OH 44022
440.893.9393

Elyria Family Health and Surgery Center

303 Chestnut Commons Drive
Elyria, OH 44035
440.366.9444

Euclid Hospital

18901 Lake Shore Blvd.
Euclid, OH 44119
216.692.7543

Fairview Hospital

18099 Lorain Ave., Suite 404
Cleveland, OH 44111
216.476.7331

Hillcrest Hospital

6803 Mayfield Road, Suite 200
Mayfield Heights, OH 44124
440.312.7246

Lakewood Hospital

14601 Detroit Ave., Suite 260
Lakewood, OH 44107
216.529.7246

Lorain Family Health and Surgery Center

5700 Cooper Foster Park Road
Lorain, OH 44053
440.204.7400

Lutheran Hospital

1730 W. 25th St., Suite 4A
Cleveland, OH 44113
216.363.2391

Marymount Hospital

12300 McCracken Road,
Suite 259
Garfield Heights, OH 44125
216.587.8830

Medina Hospital

970 E. Washington St.
Medina, OH 44256
330.721.5700

South Pointe Hospital

20000 Harvard Road,
Building A
Warrensville Heights, OH 44122
216.491.6433

Strongsville Family Health and Surgery Center

16761 SouthPark Center
Strongsville, OH 44136
440.878.2500

Twinsburg Family Health and Surgery Center

8701 Darrow Rd,
Desk TWG2-2
Twinsburg, OH 44087
330.888.4000

Westlake Pain Management Center

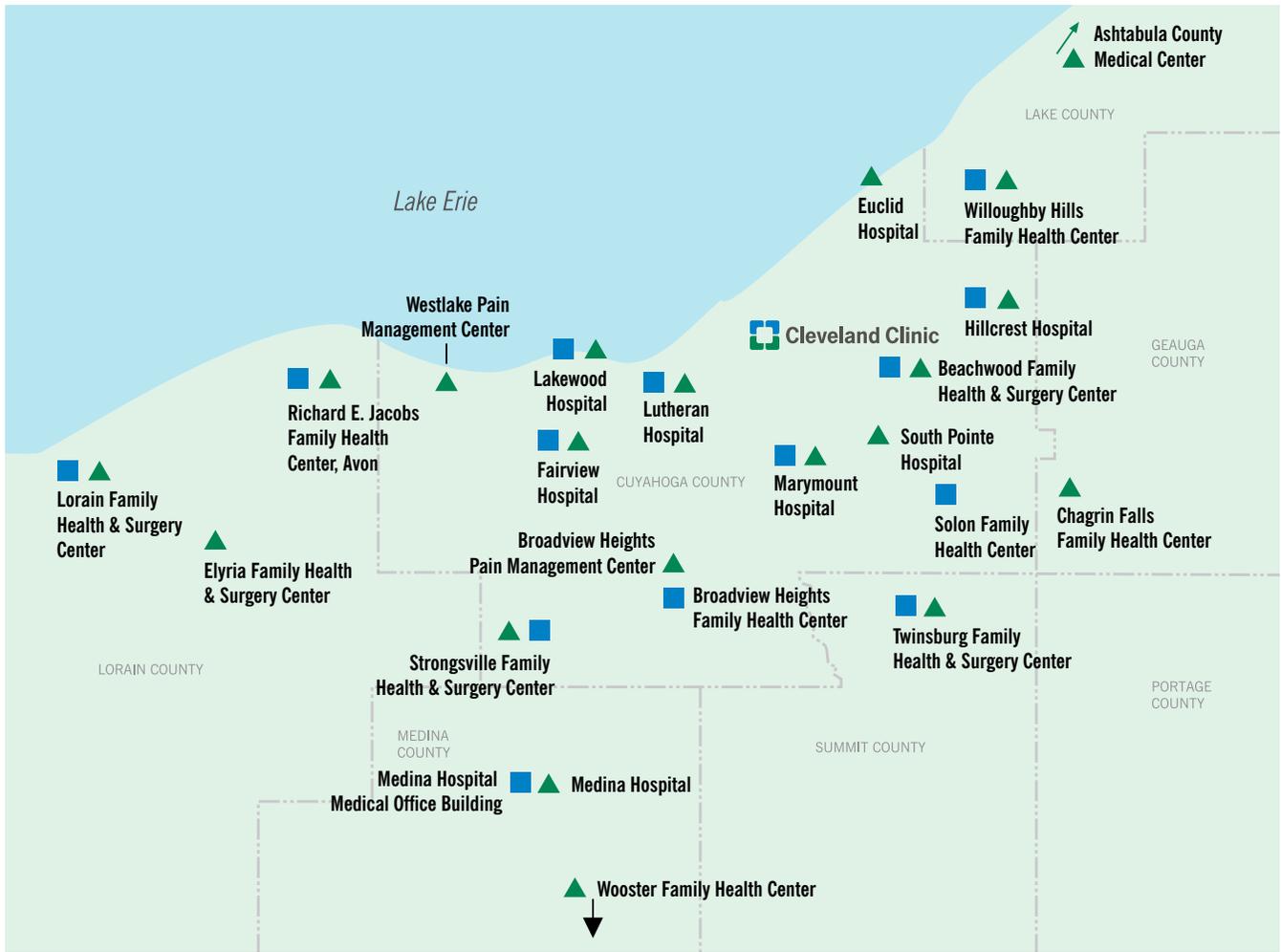
850 Columbia Road,
Suite 120
Westlake, OH 44145
440.835.8233

Willoughby Hills Family Health Center

2570 SOM Center Road
Willoughby Hills, OH 44094
440.943.2500

Wooster Family Health Center

721 E. Milltown Road,
Suite WR2-500
Wooster, OH 44691
330.287.4500



Our Regional System

 Cleveland Clinic Center for Spine Health Locations

 Cleveland Clinic Pain Management Locations