

ENGLISH ESPAÑOL 繁體中文 한국어 TIẾNG VIỆT

Back Pain

Overview, Symptoms, & Causes

Diagnosis, Treatment, & Steps To Take

Research & Resources

Overview of Back Pain

Back pain is one of the most common medical problems in the United States. It can range from a dull, constant ache to a sudden, sharp pain that may shoot down the leg. Sometimes it can come on suddenly – from an accident, a fall, or lifting something heavy, or it can develop slowly because of age-related degenerative changes in the spine. In some cases, inflammatory arthritis disorders or other medical conditions cause back pain.

Treatment varies depending on the cause and symptoms, and often there are several contributing factors. However, there are steps you can take to improve your health and lower your chance of developing chronic or long-lasting back pain.

Understanding the Anatomy of the Back

There are many different structures in the anatomy of the back that work together to support your body. Problems with any one of these structures can cause back pain.

- There are four regions of the spine:
 - O Cervical spine.
 - Thoracic spine.
 - Lumbar spine.

- O Sacrum and coccyx.
- Parts of the spine and back include:
 - Vertebrae small bones stacked on top of one another, which protect the spinal cord.
 - O Spinal cord long bundle of nerves that run down the back through a canal in the vertebrae.
 - Intervertebral discs cushion-like pads between the vertebrae that act like shock absorbers and spacers for the spine.
 - O Ligaments short bands of tough, flexible tissue that hold the vertebrae in place.
 - O Tendons cord of tissue that connects muscle to bone.
 - Muscles a bundle of dynamic fibers that support your spine and upper body and help you move.

Who Gets Back Pain?

Anyone can have back pain, and almost everyone will experience back pain at some point in their life. Several factors increase your risk of developing back pain and can include:

- Fitness level: Back pain is more common among people who are not physically fit.
 For example, weak back and stomach muscles may not properly support the spine (core strength). Back pain is also more likely if you exercise too strenuously after being inactive for a while (overdoing it).
- Weight gain: A diet high in calories and fat, combined with an inactive lifestyle, can lead to obesity. This can put stress on the back.
- Job-related risk factors: Jobs that require heavy lifting, pushing, pulling, or twisting can injure the back. A desk job may also play a role, especially if you have poor posture or sit all day in an uncomfortable chair.
- Stress level: If you chronically have poor sleep, depression, or anxiety, back pain can be more frequent and more severe.
- Age: Back pain becomes more common with age, particularly after the age of 45.
- Heredity: Genetics play a role in some disorders that cause back pain.

Types of Back Pain

Doctors and researchers describe the types of back pain in the following ways:

- Acute back pain happens suddenly and usually lasts a few days to a few weeks.
- Subacute back pain can come on suddenly or over time and lasts 4 to 12 weeks.
- Chronic back pain may come on quickly or slowly and lasts longer than 12 weeks and occurs daily.

Symptoms of Back Pain

Back pain can range from local pain in a specific spot to generalized pain spreading all over the back. Sometimes the pain radiates away from the back to other areas of your body, such as the buttocks, legs, or abdomen. The intensity of back pain varies for each person. Depending on the type, causes, and location of your back pain, you may experience:

- Increasing pain with lifting and bending.
- Worsening pain when resting, sitting, or standing.
- Back pain that comes and goes.
- Stiffness in the morning when awakening and lessened back pain with activity.
- Pain that radiates away from the back into the buttocks, leg, or hip.
- Numbness or weakness in your legs or feet.

You should see a doctor if your pain does not improve after a few weeks or if any of the following symptoms happen with your back pain:

- Numbness and tingling.
- Severe back pain that does not improve with medication (see Treatment section).
- Back pain after a fall or injury.
- Back pain along with:

- O Trouble urinating.
- O Weakness, pain, or numbness in your legs.
- O Fever.
- O Weight loss that you did not intend.

Causes of Back Pain

Back pain can be caused by many different factors, which may all be present at the same time and interact to result in chronic low back pain. These could include mechanical or structural problems with the spine, inflammatory conditions, and other medical conditions. It is also possible that no specific cause can be identified for the start of back pain.

Mechanical/Structural Problems

Back pain can happen when mechanical or structural problems develop in the spine, discs, muscles, ligaments, or tendons in the back, or compress a nerve.

- <u>Sprain</u>: an injury to the ligaments that support thes pine (which connect the different bones together), often occurring from twisting or lifting improperly.
- <u>Strain</u>: an injury to a muscle or tendon.
- Degenerative disc disease: aging causes the discs between the vertebrae of the spine to break down. It is associated with other degenerative changes in the spine, such as arthritis or spinal stenosis.
- Herniated or ruptured discs: an event causing a disc to compress and irritate nearby nerves. This often occurs at the lumbar level but can be present in the cervical spine as well.
- Spondylolisthesis: a vertebra in the spine slips out of place or gradually moves out of alignment.
- <u>Spinal stenosis</u>: a narrowing of the spinal canal that puts pressure on the spinal cord and nerves.
- Fractured vertebrae.
- <u>Scoliosis</u> or other congenital changes to the spine.

 Myofascial pain: tightness and pain of the muscles supporting the spine due to damage to the muscles or a result of the nerve input to the muscles coming from the spine.

Inflammatory Conditions

- Ankylosing spondylitis, a specific type of arthritis of the spine.
- Other types of inflammatory arthritis of the spine.

Other Medical Conditions

- Osteoporosis, which can lead to painful fractures of the vertebrae.
- <u>Fibromyalgia</u>, a condition of widespread muscle pain and fatigue.
- Kidney stones or infections.
- Endometriosis, which is the buildup of uterine tissue in places outside the uterus.
- Infections that involve the bones of the spine or the discs between these bones, which can cause back pain.
- Tumors, in rare cases, that develop on the spine or other areas of the back.
- Pregnancy.