

Topic Overview

What is neck pain?

Neck pain can occur anywhere in your neck, from the bottom of your head to the top of your shoulders. It can spread to your upper back or arms. It may limit how much you can move your head and neck.

Neck pain is common, especially in people older than 50.

What causes neck pain?

Neck pain can be caused by activities that strain the neck. Slouching, painting a ceiling, or sleeping with your neck twisted are some things that can cause neck pain. These kinds of activities can lead to neck strain, a sprain, or a spasm of the neck muscles.

Neck pain can also be caused by an injury. A fall from a ladder or whiplash from a car accident can cause neck pain. Some less common medical problems can also lead to neck pain, such as:

- An infection in the neck.
- Narrowing of the spinal canal (See figure 1 in appendix) in the neck (cervical spinal stenosis).
- Rheumatoid arthritis.

Sometimes, neck pain may not have a clear cause.

What are the symptoms?

You may feel a knot, stiffness, or severe pain in your neck. The pain may spread to your shoulders, upper back, or arms. You may get a headache.

You may not be able to move or turn your head and neck easily. If there is pressure on a spinal nerve root, you might have pain that shoots down your arm. You may also have numbness, tingling, or weakness in your arm.

If your neck pain is long-lasting (chronic), you may have trouble coping with daily life. Common side effects of chronic pain include fatigue, depression, and anxiety.

How is it treated?

The type of treatment you need will depend on whether your neck pain is caused by activities, an injury, or another medical condition. Most neck pain caused by activities can be treated at home.

For neck pain that occurs suddenly:

- Use a heating pad on a low or medium setting for 15 to 20 minutes every 2 or 3 hours. Try a warm shower in place of one session with the heating pad. You can also buy single-use heat wraps that last up to 8 hours. Or you can try an ice pack for 10 to 15 minutes every 2 to 3 hours. There is not strong evidence that either heat or ice will help. But you can try them to see if they help.
- Avoid more injury to your neck by changing activities and habits, such as how you sit or sleep.
- Try exercises or manual therapy to help you move your head and neck more easily. See a physical therapist, chiropractor, or osteopathic doctor for this type of care.

Ask your doctor if you can take acetaminophen (such as Tylenol). Ibuprofen or another anti-inflammatory medicine can also help relieve pain.

To treat chronic neck pain, your doctor may prescribe medicine to relax your neck muscles. Or you may get medicines to relieve pain and help you sleep. You might also try massage or yoga to relieve neck stress.

Surgery is rarely done to treat neck pain. But it may be done if your pain is caused by a medical problem, such as pressure on the spinal nerve roots, a tumor, or narrowing of the spinal canal.

Can you prevent neck pain?

You can avoid neck pain caused by stress or muscle strain with some new habits. Avoid spending a lot of time in positions that stress your neck. This can include sitting at a computer for a long time.

If your neck pain is worse at the end of the day, think about how you sit during the day. Sit straight in your chair with your feet flat on the floor. Take short breaks several times an hour.

If your neck pain is worse in the morning, check your pillow and the position you sleep in. Use a pillow that keeps your neck straight. Avoid sleeping on your stomach with your neck twisted or bent.

Cause

Neck pain can be caused by:

- An activity that harms the neck.
- An injury.
- Another medical condition.

- Whiplash in a car accident.
- Falls from significant heights.
- Direct blows to the face or to the back or top of the head.
- Sports-related accidents.

Symptoms

Neck pain may:

- Spread to the upper back, shoulders, or arms.
- Be worse with movement.
- Make your neck stiff or tender.
- Cause headaches. These are common and may last for months.

Nerve-related symptoms caused by pressure on the spinal nerve roots or spinal cord (See figure 2 in appendix) include:

- Numbness, tingling, or weakness in your arm or hand.
- A burning feeling when you are touched on the skin of the arm or hand.
- A pain that feels like a shock and extends into your arm or hand.
- Leg numbness or weakness, and loss of the ability to control urination (bladder control) or bowel movements. This can occur when there is pressure on or injury to the spinal cord.

What Happens

Most neck pain gets better within several weeks with treatment that includes taking steps to relieve pain, modifying activities, and doing exercises or manual therapy. Neck pain caused by an injury such as a severe whiplash may take longer but usually improves in 6 to 12 months.

Chronic neck pain

Neck pain may become long-lasting (chronic) when it occurs in combination with other health conditions, such as conditions associated with increasing age. These include narrowing of the spinal canal (cervical

spinal stenosis), arthritis of the neck (cervical spondylosis), or herniated disc. In some cases, chronic neck pain can be caused by repeated and prolonged movements, such as long hours working at a computer.

Chronic neck pain can make it hard to cope with daily life. Common side effects of chronic pain include fatigue, depression, and anxiety. For more information, see the topic Chronic Pain.

What Increases Your Risk

Risk factors for neck pain that you cannot control include:

- Age. People who are middle-aged or older are more likely to have breakdown (degeneration) of discs or joints, as well as bone spurs in the vertebrae of the neck (cervical spondylosis).
- Recent injury or history of injury. A common injury to the neck is whiplash caused by a car accident.
- Conditions that affect the bones and soft tissues of the neck and back, such as rheumatoid arthritis, a narrowing of the spinal canal (cervical spinal stenosis), or a severely curved spine (scoliosis).
- A history of headaches.

Risk factors that you can control include:

- Awkward positions that put stress on the neck, or poor posture at home or at work.
- Stress or depression, or boredom at or unhappiness with work.
- Heavy physical work.
- Smoking or drug use.
- Poor physical condition and lack of exercise.

When To Call a Doctor

Call 911 or other emergency services immediately if:

- Neck pain occurs with chest pain or other symptoms of a heart attack, such as shortness of breath and nausea.
- A person has signs of damage to the spine after an injury (such as a car accident, fall, or direct blow to the spine). Signs may include:
 - Being unable to move part of the body.
 - Severe back or neck pain.
 - Weakness, tingling, or numbness in the arms or legs.

Call your doctor now or seek immediate medical care if:

- You have new or worsening numbness in your arms, buttocks or legs.
- You have new or worsening weakness in your arms or legs. (This could make it hard to stand up.)
- You lose control of your bladder or bowels.
- You have long-term neck pain that suddenly gets much worse, and you did not cause it by being more active.
- You have a history of cancer or HIV infection, and you have new or increased neck pain.
- Pain wakes you from sleep.

For more information, see the topic Neck Problems and Injuries.

Watchful waiting

Most neck pain doesn't require a visit to a doctor.

If the pain doesn't get better after 1 or 2 days and you can't do your normal daily activities, call your doctor.

If you still have mild to moderate pain after at least 2 weeks of home treatment, talk with your doctor. He or she may want to check for problems that may be causing your neck pain.

- **MRI**, which can help identify problems such as a herniated disc or a pinched nerve.
- **CT scan**, which looks at the bone and spinal canal (See figure 1 in appendix) .
- **Myelogram**, which looks at the spinal canal and nerve roots.
- **Electromyogram and nerve conduction studies** or nerve blocks (See Nerve Block for Pain Relief in appendix), which can help find a nerve problem that is causing pain, numbness, or weakness in the arm or hand.

Treatment Overview

Most neck pain is caused by activities that involve repeated or prolonged movements of the neck. Nonsurgical treatment works well on this type of pain. Most cases of neck pain caused by activities get better in 4 to 6 weeks.¹ Acute (short-term) neck pain

Home treatment includes applying heat or ice, taking it easy but staying as active as you can, and using over-the-counter pain relievers.

For severe pain or muscle spasm, your doctor may prescribe stronger medicines.

Manual therapy, including massage, mobilization, and manipulation, can help some neck pain. See a physical therapist, chiropractor, or osteopathic doctor for this type of care and to learn stretching and strengthening exercises that you can do at home.

You can try wearing a cervical collar to support your neck (See figure 5 in appendix) . Cervical collars may reduce neck pain, but they should only be used for a day or two.

Chronic (long-term) neck pain

For long-lasting neck pain, you can use the same pain-relief measures used for acute pain. For more information, see Home Treatment.

Your doctor may also prescribe antidepressants.

People who have chronic pain syndrome and its associated problems, such as depression or substance use disorder, may respond to treatment more slowly. Counseling along with medical treatment may help in recovery.

Surgery

Surgery is rarely required for neck pain. It may be an option when neck pain is caused by certain conditions.

Prevention

For neck pain caused by posture or body mechanics

- Avoid slouching or a head-forward posture. Sit straight in your chair with your lower back supported, feet flat on the floor, and shoulders relaxed. Don't sit for long periods without getting up or changing positions. Take short breaks several times an hour to stretch your neck muscles (See Appendix) .
- If you work at a computer (See figure 6 in appendix) , adjust the monitor so the top of the screen is at eye level. Use a document holder that puts your work at the same level as the screen. For more information, see the topic Office Ergonomics.
- If you use the telephone a lot, use a headset or speaker phone. Don't cradle the phone on your shoulder.
- Adjust the seat of your car to a more upright position that supports your head and lower back. Make sure that you are not reaching for

the steering wheel while driving. Your arms should be in a slightly flexed, comfortable position.

- Use proper lifting techniques (See figure 7 in appendix) . Lift with your knees, not your back.

For neck pain caused by sleep habits

- Use a pillow (See figure 3 in appendix) that keeps your neck straight. Special neck support pillows called cervical pillows or rolls may relieve neck stress. You can also fold a towel lengthwise into a pad that is 4 in. (10 cm) wide, wrap it around your neck, and pin it in position for good support.
- Don't sleep on your stomach with your neck twisted or bent.
- If you read in bed, prop up the book so you aren't using your arms to hold it up and bending your neck forward. Consider using a wedge-shaped pillow to support your arms and keep your neck in a neutral position.

Other prevention tips

- If stress is adding to your neck pain, practice relaxation exercises. Consider getting a massage. For more information, see the topic Stress Management.
- Strengthen and protect your neck by doing neck exercises once a day.
- Stay at a healthy body weight.

Home Treatment

Even if you need medical treatment such as prescription medicines for your neck pain, the following home treatment measures will help speed your recovery.

Heat or ice

There is not strong evidence that either heat or ice will help. But it won't hurt to try them.

- Use a heating pad on a low or medium setting for 15 to 20 minutes every 2 or 3 hours.
- Take a warm shower in place of one session with the heating pad.
- You can buy single-use heat wraps that last up to 8 hours.
- Try an ice pack for 10 to 15 minutes every 2 to 3 hours.

Get moving, but carefully

- Ease back into your normal daily activities as soon as you can. Movement helps your muscles stay strong.
- Avoid activities such as lifting and sports that make pain and stiffness worse.
- Do stretching and strengthening exercises to keep your neck flexible and strong and prevent stiffness.
- Avoid or change any activities that may be causing your neck pain, such as sitting for a long time at the computer or doing too much overhead work at a time.
- Gently massage or rub the area to relieve pain and encourage blood flow. Don't massage the injured area if it causes pain. Nonprescription creams or gels, such as Bengay, may provide pain relief.

Pain relievers

- Acetaminophen (such as Tylenol) can help relieve pain.
- Nonsteroidal anti-inflammatory drugs, ibuprofen (such as Advil) and naproxen (such as Aleve), can help relieve pain and reduce inflammation.
- Be safe with medicines. Read and follow all instructions on the label.

Practice good health habits

- Try to reduce stress and tension at work and home.
- Practice relaxation exercises.
- Consider getting a massage.
- Stop smoking. Smoking slows healing because it decreases blood supply and delays tissue repair.
- Exercise regularly, including aerobic exercise such as walking.

For more information, see:

- Stress Management.
- Quitting Smoking.
- Fitness.

An important part of home treatment is learning how to keep from hurting your neck again. For more information, see Prevention.

Medications

Medicines can relieve neck pain and reduce inflammation of the soft tissues. Pain relief will allow you to move your neck gently, so you can begin easy exercises and start the healing process.

Although pain relievers, muscle relaxants, and antidepressants are commonly used for neck pain, none are well-proven treatments.²

Nonprescription pain relievers include:

- Creams or gels, such as Bengay, that are rubbed into the neck.
- Acetaminophen, such as Tylenol, which reduces pain.
- Nonsteroidal anti-inflammatory drugs, including ibuprofen (such as Advil) or naproxen (such as Aleve), that can help relieve pain and reduce inflammation. Be safe with medicines. Read and follow all instructions on the label.

Prescription pain relievers include:

- Muscle relaxants, which are used to treat severe neck pain and spasms when neck pain begins (acute neck pain).
- Opioid pain relievers, which are used to treat severe short-term (acute) neck pain.
- Antidepressants, which are used to treat long-lasting (chronic) pain.
- Corticosteroid injections. These are rarely used for neck pain. But they may be tried if you also have symptoms such as pain or numbness in your arm that suggests a nerve root is pinched or irritated (radiculopathy).
- Anticonvulsants. They may help reduce long-term neck pain. They work for some people but not others. One type of anticonvulsant may work better for you than another.

Surgery

Surgery is rarely needed for neck pain. It may be an option when:

- A neck injury causes a fracture or abnormal motion (instability). Surgery may be done to stabilize the spine and prevent a bone fracture from causing instability and possible paralysis.

- Pressure on the nerve roots or spinal cord (See figure 2 in appendix) causes numbness or arm, hand, or leg weakness; severe pain that lasts for months; or loss of bladder or bowel control. Pressure on the nerve roots or spinal cord may be caused by problems such as a narrowing of the spinal canal (See figure 1 in appendix) (cervical spinal stenosis), arthritis of the neck (cervical spondylosis), or a herniated disc in the neck.

Other Treatment

Other types of treatment for neck pain may help relieve your symptoms, restore movement, and strengthen the muscles around your spine to help prevent further injury.

Other treatment choices

Other types of treatment include:

- **Cervical (neck) collars.** These may be used for short periods of time to help reduce pain by restricting neck movement.
- **Traction.** This is a technique used to stretch the neck and relax the spinal nerve root openings. It may be used if there is no risk of instability in the neck. There is not strong evidence that traction helps.³
- **Low-level laser therapy.** This uses targeted light energy to decrease pain and promote healing. A review of studies suggests that it can help both sudden (acute) and long-term (chronic) neck pain.⁴
- **Radiofrequency ablation** (or percutaneous radiofrequency neurotomy). The purpose of this procedure is to interrupt the pain signal as it travels through the nerve. There is not strong evidence that this helps.²

Complementary medicine

Complementary medicine treatments are sometimes used to relieve pain and restore neck mobility. They include:

- **Acupuncture**, which is done by inserting very thin needles into the skin. Acupuncture is used to relieve pain and to treat many health conditions.
- **Massage**, to help with relaxation, decreased pain, and increased flexibility.
- **Yoga** or **qi gong**, which are programs of exercises to help improve flexibility and breathing, decrease stress, and maintain health.
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Find out about the safety of any complementary product or practice you want to try. Most mind and body practices—such as acupuncture, massage, and yoga—are safe when used under the care of a well-trained professional. Choose an instructor or practitioner as carefully as you would choose a doctor.

Talk with your doctor about any complementary health practice that you would like to try or are already using. Your doctor can help you manage your health better if he or she knows about all of your health practices.