

Migraine

What is a migraine?

A migraine is a severe [headache](#) that causes throbbing, pulsing head pain on one side of your head. The headache phase of a migraine usually lasts at least four hours, but it can also last for days. This headache gets worse with:

- Physical activity.
- Bright lights.
- Loud noises.
- Strong odors.

Migraines are disruptive. They can interfere with your daily routine and affect your ability to meet personal and social obligations. Treatment is available to help you manage migraines.

What are the types of migraines?

There are several types of migraines. The most common migraine categories are:

- Migraine with aura (classic migraine).
- Migraine without aura (common migraine).

An [aura](#) is a phase of the migraine before head pain begins.

Other types of migraines include:

- [Migraines in children](#) ([abdominal migraine](#)).
- [Chronic migraine](#).
- [Hemiplegic migraine](#).
- [Menstrual migraine](#).
- Migraine without headache (silent migraine).
- Retinal migraine ([ocular migraine](#)).
- [Status migrainosus](#).

How common are migraines?

Migraines are common. Studies show that an estimated 12% of people in the United States experience migraines.

Symptoms and Causes

The symptoms of a migraine come in four phases. The most notable is a headache attack.

What are the phases of a migraine?

There are four phases or stages of a migraine:

1. Prodrome: The first phase begins up to 24 hours before you experience a headache.
2. Aura: An aura is a group of sensory, motor and/or speech symptoms that act as a warning sign of a migraine headache. The aura phase can last as long as 60 minutes or as little as five. You might experience both the aura and the headache at the same time.
3. Headache: A migraine headache lasts between four hours to 72 hours.
4. Postdrome: The postdrome stage usually lasts for a few hours up to 48 hours. Symptoms feel similar to an [alcohol-induced hangover](#), which is why the postdrome phase is known as a [migraine hangover](#).

It can take about eight to 72 hours to go through the four stages.

Migraine symptoms

Migraine symptoms vary based on the stage. Every migraine is different, and you won't necessarily experience symptoms during all four stages of every migraine.

Prodrome symptoms

- Mood changes.
- Difficulty concentrating.
- Trouble sleeping.
- [Fatigue](#).
- [Nausea](#).
- Increased hunger and thirst.
- [Frequent urination](#).

Aura symptoms

- Muscle weakness.
- Vision changes.
- Ringing in your ears ([tinnitus](#)).
- Sensitivity to touch (feeling like someone is touching you).
- Numbness and tingling.
- Difficulty speaking or concentrating.

Headache attack symptoms

Head pain gradually gets more intense. It can affect one side of your head or both. It can occur with other symptoms like:

- Nausea and vomiting.
- Light, sound and odor sensitivity.

Postdrome symptoms

- Fatigue.
- Stiff neck.
- Sensitivity to light and sound.
- Difficulty concentrating.
- Nausea.
- Dizziness.

What does a migraine feel like?

Migraine headache pain may feel like the following:

- Throbbing.
- Pulsing.
- Pounding.
- Dull.

A migraine can feel different for each person. A migraine headache ranges from mild to severe. Head pain can start on one side and shift to the opposite side. You may also have pain around your eyes or temple, and sometimes, around your face, sinuses, jaw or neck.

How often do migraines happen?

The frequency of a migraine varies from person to person. You might have one migraine per year or one per week. On average, most people experience two to four per month. They're most common in the morning. Most migraines are unpredictable, but sometimes, you can have an idea of when a migraine will happen, like before [menstruation](#) or after feeling [stress](#).

What causes a migraine?

Researchers aren't sure of the exact cause of migraines, but studies show [genetics](#) play a role.

When you have a headache, specific [nerves](#) in your [blood vessels](#) send pain signals to your [brain](#). This releases [inflammatory](#) substances into your head's nerves and blood vessels. It's unclear why your nerves do that.

What triggers a migraine?

A trigger is something that causes symptoms to start. Some of the most common migraine triggers include:

- Stress.
- [Hormonal](#) changes.
- Certain medications.
- Changes to your [sleep](#).
- Weather condition changes.
- Too much physical activity (overexertion).
- Addictive substances like caffeine or tobacco.
- Missing a meal.
- Exposure to bright lights, loud noises or strong odors.

Your healthcare provider can help you identify your triggers. They might recommend keeping a migraine journal to track similarities between migraine attacks.

What foods trigger migraines?

Your body may have a sensitivity to specific chemicals and preservatives in foods. This sensitivity makes a migraine more likely to happen, especially if combined with other triggers.

Some of the most common food triggers include:

- Aged cheese.
- Beverages containing alcohol.
- Chocolate.
- Food additives like nitrates and MSG.
- Processed or cured foods (hot dogs, pepperoni).
- Fermented or pickled foods.

Are migraines hereditary?

Yes, migraines tend to run in biological families. Up to 80% of people with migraines have a first-degree biological relative with the condition.

What are the risk factors for a migraine?

A migraine can affect anyone at any age, from children to adults. Women and people [assigned female at birth](#) are more likely than men and people assigned male at birth to experience a migraine.

Other risk factors that may make you more likely to experience a migraine include:

- Biological family history of migraines.
- Underlying medical condition ([depression](#), [anxiety](#), [sleep disorders](#) and [epilepsy](#)).

- Regular use of tobacco products.

Diagnosis and Tests

How is a migraine diagnosed?

A healthcare provider will diagnose a migraine after a [physical](#) exam and [neurological exam](#). They'll also learn more about your medical history and biological family health history. Your provider may ask you questions to learn more about your symptoms, including:

- What symptoms do you experience?
- Can you describe the feeling and location of your headache?
- How severe are your symptoms?
- How long did your symptoms last?
- Did anything make your headache better or worse?

Your provider may also order [blood tests](#) and imaging tests (such as a [CT scan](#) or an [MRI](#)) to make sure there aren't any other causes for your headache. An [electroencephalogram \(EEG\)](#) may help your provider rule out other conditions.

Who diagnoses a migraine?

If you think you have a migraine, discuss your symptoms with a [primary care physician](#) (PCP) first. They can diagnose migraine headaches and start treatment. Your PCP may refer you to a headache specialist or a [neurologist](#).

Management and Treatment

How is a migraine treated?

There isn't a cure for migraines. But a healthcare provider can help you manage migraine symptoms through the following:

- Taking medications.
- Avoiding migraine triggers.
- Using alternative migraine remedies.

What medications treat migraines?

A healthcare provider might recommend taking [medications](#) to treat migraines. There are two types of medications available:

- Medications to stop migraines: You can take these medications at the first sign of a migraine. They stop or reduce migraine symptoms like pain, nausea, sensitivity and more.
- Medications to prevent migraines: A healthcare provider usually prescribes preventive medications if you experience severe symptoms that interfere with your routine or have frequent migraines. These medications reduce how often and how severe migraines affect you. You can take these medications as directed, usually on a daily basis.

Common medications that stop migraines include:

- [Triptans](#) (5-hydroxytryptamine).
- Ditans ([lasmiditan](#)).
- Gepants ([rimegepant](#) and [ubrogepant](#)).
- Dihydroergotamine ([prochlorperazine](#)).
- Antiemetic medications ([metoclopramide](#)).

Common preventive migraine medications include:

- [Antiseizure](#) medications ([valproic acid](#), [topiramate](#)).
- [Beta-blockers](#) ([atenolol](#), [propranolol](#), [nadolol](#)).
- [Calcium channel blockers](#) ([verapamil](#)).
- [Monoclonal antibodies](#) ([erenumab](#), [fremanezumab](#), [galcanezumab](#)).
- [Tricyclic antidepressants](#) ([amitriptyline](#), [nortriptyline](#), [doxepin](#)).
- [Serotonin and norepinephrine reuptake inhibitors](#) ([venlafaxine](#), [duloxetine](#)).

Medications come in different forms, like:

- An injection under your skin (subcutaneous).
- An oral medication (taken by mouth).
- A nasal spray.
- Through an IV (intravenously).
- Suppository.

You and your healthcare provider will discuss the specific medication, combination of medications and formulations to best manage your symptoms. All medications should be used under the direction of a headache specialist or provider. As with any medication, it's important to carefully follow your provider's instructions.

Over-the-counter migraine medications

Over-the-counter migraine medications are effective if you have mild to moderate migraine symptoms. The main ingredients in pain-relieving medications are [ibuprofen](#), [aspirin](#), [acetaminophen](#), [naproxen](#) and caffeine.

Be cautious when taking over-the-counter pain relievers. Sometimes, overusing them can cause analgesic-[rebound headaches](#) or a dependency problem. If you're taking any over-the-counter pain medications more than two to three times a week, let your healthcare provider know. They may suggest more effective prescription medications.

Avoiding migraine triggers

A healthcare provider can help you identify what triggers your migraines. They may ask you to keep a migraine journal or diary. A migraine journal can help you keep track of when a migraine happened, how you felt and how long it lasted. You can also add details about the foods you ate or the activities you participated in to learn more about any possible triggers.

There are some smartphone apps available to help you keep a migraine journal.

Once you identify a trigger, you can take steps to avoid it. This isn't always possible, but awareness of your triggers is helpful to identify them and treat a migraine when it starts.

For example, if stress is a trigger, you may want to speak with a mental health professional to help you manage your stress. If you get migraine symptoms when you miss a meal, set an alarm on your phone to remind you to eat meals on a regular schedule.

Alternative migraine remedies

You may want to try alternative therapies to help you manage migraines. These include:

- Taking vitamins, minerals or herbs like [riboflavin](#) (vitamin B2), magnesium, feverfew, butterbur or [co-enzyme Q10](#).
- Relaxation techniques like [yoga](#).
- [Acupuncture](#).
- [Biofeedback](#).
- [Botulinum toxin](#) type A injections (Botox®).

Talk to your healthcare provider before starting any alternative therapies for migraines.

What migraine treatments are available during pregnancy?

Talk to your healthcare provider if you're [pregnant](#) or plan on becoming pregnant and experience migraines. Your provider might suggest avoiding medications for migraines when you're pregnant or if you think you may be pregnant. Some medications can negatively affect the fetus's development.

Your provider can recommend alternative treatment options like an acetaminophen pain reliever for migraines.

How do I deal with a migraine as it happens?

There are certain things you can do to help you feel better when a migraine attack happens, including:

- Resting in a dark, quiet, cool room.
- Applying a cold or warm compress or washcloth to your forehead or behind your neck.
- Massaging your scalp.
- Applying pressure to your temples in a circular motion.
- Keeping yourself in a calm state (meditating).

Prevention

Can a migraine be prevented?

You can't prevent all migraines. But you can take preventive migraine medications as directed by your healthcare provider to reduce how often and how severe migraine symptoms affect you. You can also learn more about your triggers and work with your healthcare provider to avoid them.

Outlook / Prognosis

What's the outlook for a migraine?

Migraines are different for each person. They're temporary but recurring throughout your life. There's also no available cure. Your healthcare provider can help you manage migraines so they go away faster and are less intense. It may take time to find a treatment option that's right for you. Let your healthcare provider know if your symptoms improve or get worse.

Living With

When should I see a healthcare provider?

Schedule a visit with your healthcare provider if you experience:

- New symptoms.
- Worsening symptoms.
- Side effects from treatment.

Call 911 (or your local emergency services number) or go to an emergency department right away if you:

- Experience the worst headache of your life ([thunderclap headache](#)).
- Have new neurological symptoms that you've never had before, like difficulty speaking, balance problems, vision issues, confusion, [seizures](#) or numbing/tingling sensations.
- Have a headache after experiencing a head injury.