

Paresthesia

OVERVIEW | POSSIBLE CAUSES | CARE AND TREATMENT | WHEN TO CALL THE DOCTOR | FREQUENTLY ASKED QUESTIONS

What is paresthesia?

"Paresthesia" is the technical term for the sensation of tingling, burning, pricking or prickling, skin-crawling, itching, "pins and needles" or <u>numbness</u> on or just underneath your skin. It can affect places on and throughout your body and happens without an outside cause or warning.

Paresthesia (sometimes known as "paresthesia of skin") is a very common experience. Everyone experiences it at some point, and it can happen for many reasons. Many of the common causes are harmless and are just a reflection of how your body works normally. But in some cases, paresthesia can signal a medical issue.

There are two main forms of paresthesia:

- Transient (temporary): This is the more common type. As the name suggests, it doesn't last long. An example would be a brief tingling or pins-and-needles feeling in your leg if you sat a certain way too long. Once you extend your leg, the feeling should return to normal.
- Persistent (chronic): This is when paresthesia lingers and doesn't go away. It's generally a symptom of issues that may need
 medical attention. Conditions like <u>carpal tunnel syndrome</u> or <u>cubital tunnel syndrome</u> are relatively minor ways that
 persistent paresthesia can happen. But you can also have persistent paresthesia from a lack of circulation or nerve
 damage, both of which are often more serious.

Possible Causes

What are the most common causes of paresthesia?

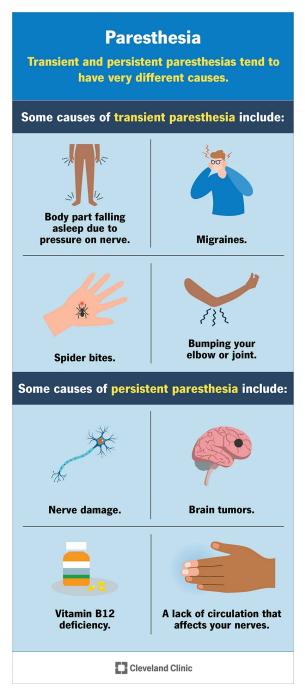
Transient and persistent paresthesias tend to have very different causes.

Transient paresthesia

Transient paresthesia is very common, and it's usually harmless. It commonly happens because of body positioning that puts pressure on a nerve or limits blood flow (like folding a kink into a hose to keep liquid from flowing through). That can cause the affected body part to "fall asleep" (the technical term for this is "obdormition"). Paresthesia is the feeling of pins and needles that happens when you change position and release the pressure on the nerve or blood vessels in that body part.

Transient paresthesia can also happen if you hit certain body parts against solid objects. For example, bumping something with your elbow can cause a sharp, shock-like feeling of tingling or pain in your <u>ulnar nerve</u>. That's known as "hitting your funny bone," as your ulnar nerve is at the lower end of your main upper arm bone, your <u>humerus</u>.

Some other causes of transient paresthesia include:



Paresthesia can be a transient, short-lived concern or it can be persistent and longer-lasting. Persistent causes are more likely to be serious medical conditions or events.

- Dehydration.
- Formication (a touch-based hallucination that feels like bugs crawling on your skin).
- Hyperventilation.
- Migraines.
- <u>Nerve compression syndromes</u>, such as <u>carpal tunnel syndrome</u> and cubital tunnel syndrome (these can become persistent when they're moderate or severe).
- Panic attacks.
- Renaud's syndrome.
- Seizures.

· Whiplash.

Persistent paresthesia

Persistent paresthesia means it's constant or happens very often. It's more likely to be from serious causes, which tend to fall into certain categories.

Circulatory causes

One broad category is circulatory causes. A lack of circulation that affects your nerves can disrupt how those nerves carry signals to and from your brain. That can cause paresthesia.

<u>Thoracic outlet syndrome</u> is an example of a circulatory condition that may cause paresthesia. When it's chronic, Reynaud's syndrome can also be a form of circulatory-related paresthesia.

Nervous system causes

Neurological causes can involve your brain, spinal cord or nerves anywhere in your body. Some examples of neurological causes include:

- Ataxia-telangiectasia.
- Brain tumors.
- Brain bleeds.
- Charcot-Marie-Tooth disease.
- Head injuries, such as concussions and traumatic brain injuries (TBIs).
- · Herniated disks.
- Nerve damage from <u>burns</u> or <u>frostbite</u>.
- Neuralgia (nerve pain) diseases, including occipital neuralgia and trigeminal neuralgia.
- Peripheral neuropathy.
- <u>Pinched nerves</u> or <u>radiculopathy</u>.
- · Spinal stenosis.
- Strokes or transient ischemic attacks (TIAs).

Metabolic and endocrine causes

Metabolic and endocrine causes include vitamin deficiencies, conditions that affect certain hormones and more. Examples include:

- <u>Diabetes-related neuropathy (nerve damage)</u>.
- Electrolyte imbalances.
- Low blood sugar (hypoglycemia).
- Low parathyroid function (hypoparathyroidism).
- Low thyroid function (hypothyroidism).
- · Menopause.
- Vitamin B1 (thiamine) deficiency (also known as beriberi), B5 deficiency, B6 deficiency and <u>B12 deficiency</u>.

Infectious diseases

Infectious diseases can commonly cause paresthesia when they affect nerves or parts of your brain. Examples of these conditions include:

- Any infection that can affect your brain and cause encephalitis or meningitis.
- Guillain-Barré syndrome.
- Hansen's disease (leprosy).
- Herpes simplex virus.
- Herpes zoster virus (shingles).
- Human immunodeficiency virus (HIV).
- · Lyme disease.
- Syphilis.

Autoimmune and inflammatory diseases

Autoimmune conditions are when your immune system attacks parts of your own body. Paresthesia is one of the possible symptoms of an autoimmune condition that attacks your nerves. Inflammatory conditions can also cause swelling and tissue changes that affect nerves. These conditions can include:

- Fibromyalgia.
- <u>Lupus</u>.
- Multiple sclerosis.
- Rheumatoid arthritis.
- Sjögren's syndrome.
- Transverse myelitis.

Toxic effects

Like many tissues in your body, your nervous system is vulnerable to toxins and poisons. Examples of toxic sources of paresthesia include:

- Arsenic poisoning.
- · Carbon monoxide poisoning.
- · Chemotherapy.
- Lead poisoning.
- Mercury poisoning.
- Neuropathy from <u>alcohol use disorder</u>.
- Radiation sickness or burns.
- Snake bites.
- Spider bites.
- Scorpion stings.
- Venomous stings/bites from other animals.

Other causes

Other conditions can also cause paresthesia. These can involve organ problems or conditions that don't fall under the ones mentioned above. A few examples include:

- Amyloidosis.
- Porphyria.
- Uremia.

Care and Treatment

How is paresthesia treated?

Some forms of paresthesia — especially transient forms like a limb falling asleep — don't need treatment. But many other forms of paresthesia may need treatment. The treatments depend on the underlying cause, which means the treatments can vary widely. Your healthcare provider is the best person to tell you about the possible treatments and which they recommend.

What are the possible complications or risks of not treating it?

Most causes of paresthesia need treatment. Many of these conditions, especially several circulation-related and neurological causes, are dangerous or life-threatening without treatment. Other conditions that cause it, while not dangerous, are disruptive and can negatively affect your quality of life without treatment.

You should talk to a healthcare provider if you have paresthesia that affects the same body part on both sides, such as your hands or feet. You should also talk to a provider if you frequently have paresthesia that isn't posture/body position-related. They can tell you what's causing your paresthesia and whether or not it needs treatment.

When to Call the Doctor

When should I worry about paresthesia or get it treated by a healthcare provider?

If you have paresthesia frequently or constantly, you shouldn't treat it on your own without first talking to a healthcare provider.

Paresthesia can be a symptom of serious medical conditions, some dangerous or even life-threatening. It's important to talk to a healthcare provider if you have paresthesia that affects the same body part on both sides or if it happens with other symptoms (weakness or loss of function, loss of balance) that disrupt your life (even if the paresthesia doesn't seem connected to the other symptoms).

A healthcare provider can evaluate your paresthesia and any related symptoms. Once they do, they can advise you on what's causing your paresthesia and what you can do about it.

Frequently Asked Questions

Paresthesia vs. neuropathy — what's the difference?

"Neuropathy" is a blanket term for any disease that affects a nerve. Paresthesia can be a symptom of neuropathy but can also happen for many other reasons. A healthcare provider can tell you if you have paresthesia because of neuropathy or for another reason.

What's the difference between paresthesia and numbness?

Numbness is when you can't feel sensations in the affected area. Paresthesia is a sensation you may feel when there's a disruption in your sense of touch in the affected area.

Paresthesia and numbness are like neighbors when it comes to physical sensations. You often feel paresthesia just before numbness sets in, or paresthesia can be what you feel when sensation returns.

A note from Cleveland Clinic

Paresthesia is something that everyone experiences at some point in their life. Most of the time, it's from simple, harmless reasons like sitting in a position that causes your leg to fall asleep or sleeping on your hand for an extended period, making it feel numb for a while.

But paresthesia can also signal more serious health conditions. If you have paresthesia that keeps happening for unknown reasons, or if it happens with other symptoms, you should talk to your primary care provider or another healthcare provider. They can pin down what's causing your paresthesia and help you understand why it's happening and what — if anything — needs to be done about it.

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