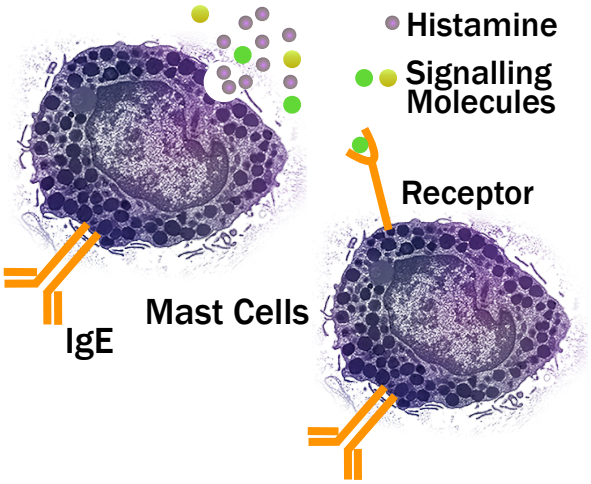
What causes a hive?

Hives are caused by cells in your skin called mast cells, which are normal cells that live in everyone's skin and tissues. These mast cells can break open and release histamine and other natural chemicals and signaling molecules. Histamine is mainly responsible for how you feel – it causes itching, swelling, and maybe redness. This is also why hives are treated with an anti-histamines: to block this pathway. The other chemicals can trigger more mast cells to break open, so hives can be self-perpetuating until these cells are fully shut off.

When these cells break open in the top layer of your skin, a hive forms. Sometimes physical triggers can break open these cells. When the cells break open deeper in the tissue, the tissue is pushed up which results in swelling. This commonly occurs in the lips or around the eyes or face, where the skin is thinner. Patients with swelling from this cause almost never progress to any life-threatening swelling that would affect their breathing or swallowing, and typically do not need an epipen for this disease process.



Treatment of Hives

The mainstay of treatment for hives are antihistamines and most people respond quite well.

When used for seasonal allergies affecting your nose or eyes, one pill per day is often enough. Because your skin is a much larger organ, patients often need much higher doses of antihistamines to suppress and block the hives.

Antihistamines, especially newer long-acting ones, have very minimal side effects, from mild sedation in some to mild dry mouth and nose. Older ones, like Benadryl (diphenhydramine), are very fast-acting, but only last four to six hours and make most people very sleepy.

Other medications to suppress your immune system may be used. Oral steroids (prednisone) may be used temporarily to relieve chronic hives, but they should not be used for long-term treatment. This is because steroids can have serious side effects when taken for long periods of time (months or years).

Finally, there is a monthly injectable medication called Omalizumab (Xolair), which can help reduce hives. This is a good option for patients who are not responding well to the standard medications. Other oral anti-inflammatory medications may also be used.

To summarize, chronic urticaria, or classic hives regularly > 6 weeks, is almost never from something external like a food, so if you did not have known food allergies before your hives began, it's very unlikely you have them now. Antihistamine pills are the mainstay for treating your hives, and you should not stop them until instructed by your doctor. If you get any swelling episodes, it is from the same disease process, so getting your hives under control will also help the swelling.

Hives (Urticaria)

Urticaria is the medical term for hives.

- Hives are swollen, sometimes raised bumps on your skin
- Often very itchy
- Sometimes red or merging together
- May look and feel like a bug bite, but only last for a few hours

Hives are common.

- About 20% of people get hives at some point in their lives
- Our practice probably sees 10-20 people per week for hives, so you are not alone
- About 1% of people develop chronic hives (see inside), which can begin at any age.
- Chronic hives can last 2-5 years despite treatment
- In 50% of people, the chronic hives go away within a year

People with hives can also have swelling, or what is medically called angioedema.

- About 40-50% of people with hives have angioedema
- This is a hive deeper in the tissue
- Swelling may occur in other body parts including your lip, tongue, or face
- The medications that treat and prevent hives should also treat and prevent any swelling

This brochure will explain the types of hives, the causes of hives, and treatment for hives.

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The time course of your hives makes a very important difference, as it helps us figure out the potential underlying cause.

How long does one hive last?

Hives are typically present for only a few hours. While you may have hives every day, classic hives only last a few hours and then go away. They can be "migratory", which just means popping up in different spots. This is in contrast to bug bites, where the itchy bump usually lasts at least a few days if not longer.

There are rare types of hive disorders where hives may last more than 24 hours in the same spot, be painful, or possibly leave a bruise when they fade. Hives persisting in the same spot may also be accompanied by low-grade fevers or joint pain. Sometimes we may need the help of a dermatologist to biopsy a hive in this case.

How often do you get hives?

The length of time you have had hives can suggest different causes. For some people, hives are irregular and intermittent. This is called **inducible urticaria**. If you have hives for only a day or two once or twice a year, usually we can pinpoint the exact trigger. This may be a sign of an allergic reaction to a food, a one-time medication, an insect sting, or another cause. If you had hives from an allergic reaction, you may also have had trouble breathing, nausea and/or vomiting, cramping belly pain, dizziness or passing out, or tightness in your throat. For inducible urticaria, we will work to find a trigger(s) to eliminate or avoid.

Do you get hives daily? Or almost daily?

If you have had regular, daily (or almost daily) hives for *less than 6 weeks*, this is called **acute urticaria**.

- Often caused by a virus
- Often lasts only 1–2 weeks
- A variety of viruses can cause hives as your immune system responds to the virus, similar to how viruses can cause rashes like measles or chickenpox
- Determining the exact virus is not necessary and will not affect treatment

Unless you made a significant life change before or around the start of your hives, like adding a new medication, starting a new supplement, or regularly taking an over-the-counter pill (e.g. Ibuprofen), it is very unlikely there is something external that is causing your hives.

Have your hives lasted longer than 6 weeks?

Regular hives lasting *longer than 6 weeks* is called **chronic urticaria**.

- Frustrating – hives can interfere with sleep, work, or school.
- Not contagious
- Very treatable in most people
- Rarely permanent; almost 50% of people are hive-free within one year.

Chronic hives are very rarely caused by "allergies" and are not life-threatening. A food allergy cause of hives typically occurs 2 minutes to 2 hours after eating a food – most patients with chronic urticaria wake up in the middle of the night or morning with hives, so a food trigger is very unlikely. **Adults very rarely develop a new food allergy**, so you likely do not need to eliminate any foods you have regularly eaten in the past. Chronic urticaria is almost never a new soap, new detergent, or some other different external trigger.

Why did I get chronic hives?

In most cases of chronic hives, the cause is unknown. **Testing to determine a cause of chronic urticaria is almost never helpful, and not recommended by national allergy organizations.** Researchers suspect that a confused immune system plays a role. Sometimes a patient's immune system will remember having a cold or infection during the month before their hives began, and in trying to remember and attack that virus or bacteria, your immune system is now recognizing itself.

Very rarely, chronic hives can be the first sign of an underlying disorder, so your doctor may want to check labs to ensure your blood counts are normal, and your organs (kidney, liver, and thyroid) are all working well.

Patients with a known autoimmune condition, like lupus or an autoimmune thyroid disease can also develop hives when their immune system responds to itself.

Some patients can have worsening of hives with NSAIDs (Ibuprofen, Advil, Motrin) or pain medications, so you may want to be cautious taking these if you have chronic urticaria.

People with chronic and/or inducible urticaria can have physical triggers that cause hives, even scratching your skin. This is called **dermatographism**, which means writing on skin. Your doctor likely scratched you to determine if you are "dermatographic." Patients with this condition often get lines of hives, or notice them under areas of pressure like a bra strap or underwear band.

- Very common: seen in 2-5% of people
- Researcher do not know why this develops or how long it typically lasts
- Some people's bodies may change over time
- Other physical triggers can include heat, cold, vibration, sunlight, or other causes.

If you are dermatographic, keeping your skin moisturized and not itchy will help you scratch less and hopefully develop fewer hives.