

**Partners in Pediatrics, PC**  
7110 Forest Ave  
Suite 105  
Richmond, VA 23226  
804-377-7100

# Hives (Urticaria)

Seeing red raised spots on a child's skin can be frightening, especially when their cause is unknown. Often, though, these spots are a case of the hives — a common biological reaction to something like an allergen — and most eventually clear up and go away.

Although hives can return at some point, they rarely cause health problems more serious than itching or a mild burning sensation.

If your child has hives, keep him or her as comfortable as possible, then try to figure out what caused them to help prevent them from coming back.

## About Hives

Hives (or urticaria) are red raised bumps or welts on the skin. They can occur anywhere on the body as small individual spots or large interconnected bumps.

Individual hives can last anywhere from a few hours to a week (sometimes longer), and new ones might replace those that fade. Hives that persist for 6 weeks or less are called **acute hives**; those that go on longer than 6 weeks are **chronic hives**.

An allergic reaction can cause hives, as can temperature extremes, stress, infections, or illnesses. In some cases, hives are accompanied by angioedema, a condition that can cause swelling around the eyes, lips, hands, feet, or throat. Very rarely, hives and angioedema are associated with a serious allergic reaction, or anaphylactic shock.

## Causes

The red welts of hives arise when mast cells in the bloodstream release the chemical histamine, which causes tiny blood vessels under the skin to leak. The fluid pools within the skin to form spots and large welts. This can happen for a number of reasons, but in many cases a cause is never identified.

Most often, hives are associated with an allergic reaction, which can cause a breakout to occur within minutes. Some of the more common allergies include:

- foods, especially shellfish, tree nuts, milk, and fruit

- medications and allergy shots
- pets and other animals
- pollen
- insect bites and stings

Touching something you're allergic to also can cause a case of hives, but sometimes a breakout has nothing to do with allergies. Other causes include:

- infections, including colds
- exercise
- anxiety or stress
- exposure to the sun
- exposure to cold, such as from diving into a cold pool
- contact with chemicals
- scratching
- putting pressure on the skin, such as from sitting too long or carrying a heavy backpack over a shoulder

Hives due to physical stimuli, such as pressure, cold, or sun exposure, are called **physical hives**.

It can be difficult to figure out what causes chronic urticaria, though it's sometimes linked to an immune system illness, like lupus. Other times, medications, food, insects, or an infection can trigger an outbreak. Often, though, doctors don't know what causes chronic hives.

## Signs & Symptoms

Hives' hallmark red raised welts sometimes have a pale center, and can appear in clusters and change shape and location in a matter of hours. They can be from a few millimeters wide to as big as a dinner plate, and can itch, sting, or cause a burning sensation.

If angioedema also is present, there might be puffiness, swelling, or large bumps around the eyes, lips, hands, feet, genitals, or throat. In severe cases, swelling in the throat can cause difficulty breathing and lead to a loss of consciousness.

Rarely, hives and angioedema can be associated with anaphylactic shock. Signs of anaphylactic shock include difficulty breathing, a drop in blood pressure, dizziness, or a loss of consciousness.

## Diagnosis

Most of the time, a doctor can diagnose hives just by looking at the skin. To determine the cause, you may be asked questions about your child's medical history, recent exposure to potential allergens, and daily stressors.

If your child has chronic hives, the doctor may ask you to keep a daily record of activities, such as what your child eats, drinks, and where the hives tend to show up on the body. Diagnostic tests — which might include blood tests, allergy tests, and tests to rule out underlying conditions such as thyroid disease or hepatitis — might be done to find the exact cause of the hives.

To check for physical hives, a doctor may put ice on your child's skin to see how it reacts to cold or place a sandbag or other heavy object on the thighs to see if the pressure will cause hives to appear.

## **Treatment**

In many cases, mild hives won't require any treatment and will go away on their own. If a definite trigger is identified, treatment includes making sure your child avoids it. If itchiness associated with hives is a problem, the doctor may recommend an antihistamine medication to block the release of histamine in the bloodstream and prevent breakouts.

For chronic hives, the doctor may suggest a non-sedating prescription or over-the-counter antihistamine to be taken every day. Not everyone responds to the same medications, though, so it's important to work with a doctor to figure out the right medication for your child.

If a non-sedating antihistamine doesn't work, the doctor may suggest a stronger antihistamine or another medication or a combination of medicines. In rare cases, a doctor may prescribe an oral steroid to treat chronic hives. Typically this will only be done for a short period (5 days to 2 weeks) as a caution against harmful steroid side effects.

## **In Case of Emergency**

Anaphylactic shock and severe attacks of hives or angioedema are rare. But when they happen, they require immediate medical care.

Kids with serious allergies need to carry an injectable shot of epinephrine to prevent life-threatening allergy attacks. If your child is at risk, the doctor will instruct you and your child on how to safely administer an injection in the event of a severe allergic reaction.

Reviewed by: Patrice Hyde, MD and Christopher C Chang, MD

Date reviewed: June 2011



© 1995-2013 The Nemours Foundation/KidsHealth. All rights reserved.

Note: All information is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult your doctor.