

Eczema

Nearly 1 out of 10 people worldwide will develop eczema. A term that describes skin conditions characterized by irritated, inflamed, itchy patches of skin. Eczema is also called dermatitis, and the terms are often used interchangeably. In some people, eczema causes the skin to appear very red with a rash that seems to bubble up. In others it can appear scaly and dry with less discoloration. Eczema often appears after an itch has been scratched and is commonly referred to as “the itch that rashes.” In this animation you will learn how Eczema occurs and what triggers it, the different types of eczema and how you can manage your eczema and possibly prevent future outbreaks.

Our skin is composed of 2 layers, **the epidermis** and the **dermis**. The epidermis is the outer layer that acts as the body’s primary defense against the environment. The dermis is the innermost layer is responsible for providing structure and support to the skin.

Eczema is believed to arise when the body’s immune system is triggered to an abnormal, over active inflammatory response that involves both the epidermis and the dermis. Another theory suggests that in some cases a defective epidermis causes an individual to be particularly sensitive to substances that cause an inflammatory response. The inflammation that results from eczema irritates patches of skin causing them to itch. Regions of elevated fluid filled bumps may also develop. With continued scratching these bumps may burst and exude pus and become crusty or the skin may become dry and cracked. Although Eczema is not commonly associated with life threatening risks, if scratching causes any openings in the skin that penetrate into the dermis, the skin could become infected.

When and Where Does Eczema Occur?

Eczema occurs at any age and tends to arise in certain body areas depending on age. For example, in infants, eczema typically occurs on the forehead, cheeks, forearms, legs, scalp and neck. In contrast, children and adults most commonly experience patches of eczema on the face, neck, upper chest, elbow creases, wrists, hands, fingers, ankles, back of the knees and feet. However, it is important to realize that eczema can occur on any part of the body at any age. Depending on the cause and type of eczema it can spread over large areas of the body or it may be confined to specific region. As in cases where the eczema may be triggered by contact with a particular substance.

Although dermatologists do not fully understand the exact cause of all eczema, they have identified a variety of potential sources. Some people may have a genetic predisposition because eczema tends to be more common in people who have 1 or more family affected by eczema, allergies and asthma. In others, eczema may result from a variety of factors known to trigger eczema flare ups, which include the following categories: common household items,

health and beauty products, chemicals, foods, living organisms, fabrics and environmental factors.

The most common type of eczema is known as atopic eczema. This type of eczema affects 10-20% of infants in the U.S. Although atopic eczema usually occurs before the age of 5, it can appear for the first time or reappear periodically at any age. This type of dermatitis is believed to result from an interaction of genes, the environment, the way the epidermis renews itself in particular individuals, and an overactive immune system. Most affected individuals have a family history of allergies and one or two parents who have experienced eczema in the past.

Contact Dermatitis

Contact dermatitis occurs when a substance that causes an inflammatory response touches the skin. There are two primary forms of contact dermatitis known as irritant contact dermatitis and allergic contact dermatitis. Substances that irritate the skin, such as a chemical or a particular type of soap, cause irritant contact dermatitis. This form generally requires contact with a certain threshold amount of the irritating substance before symptoms develop. After contact with this threshold amount, the skin gradually starts to react and a rash typically develops in the exposed area.

Allergic Contact Dermatitis

Allergic contact dermatitis arises after exposure to an allergen, such as poison ivy. Even small amounts of the allergen can trigger a response in susceptible individuals. Unlike irritant contact dermatitis, the body's immune system may overreact in response to the allergen, which can cause inflammation to spread to areas of the body that didn't actually contact the substance.

Preventing and Treating Eczema

Although there is no real cure for eczema, symptoms can often be reduced or prevented by avoiding specific triggers, such as those shown on your screen. The most effective measure you can take to clear an eczema flare-up is to avoid the urge to scratch the affected area, as this may worsen outbreaks. To avoid further irritation, keep your fingernails short and smooth, bathing in lukewarm water, using special cleansers, and applying moisturizers directly after bathing are also often effective in clearing symptoms. Other common treatments are shown on your screen. In the severe cases where other treatments have failed to work, medications that affect the body's immune response may be recommended.

Contact dermatitis symptoms generally subside after removing the source. This process may take several weeks to clear, but can often be shortened to days with treatment. Oral medications prescribed for severe cases can be quite effective and have few side effects when taken for a short duration.

About half of the atopic eczema cases in infants clear by a year and a half to two years of age, while others take longer or may never completely disappear. A person may continue to exhibit signs into adulthood, primarily as eczema on the hands. When treated, atopic eczema can be stubborn and is prone to recurring outbreaks. You may need to adjust how you use medications, switch to stronger medications, or even reduce your stress level by taking more time for relaxing activities. Fortunately, the therapies available today are often effective, and with proper treatment and prevention, most eczema can be controlled or even alleviated.