Atopic dermatitis, also known as eczema, is a non-contagious inflammatory skin condition that affects an estimated 30 percent of the U.S. population, mostly children and adolescents. It is a chronic disease characterized by dry, itchy skin that can weep clear fluid when scratched. People with eczema also may be particularly susceptible to bacterial, viral, and fungal skin infections.

Researchers estimate that 65 percent of people with atopic dermatitis develop symptoms during the first year of life, sometimes as early as age 2 to 6 months, and 85 percent develop symptoms before the age of 5. Many people outgrow the disease by early adulthood.

What Are the Causes?

The cause of atopic dermatitis is unknown, but a combination of genetic and environmental factors appears to be involved. The condition often is associated with other allergic diseases such as asthma, hay fever, and food allergy. Children whose parents have asthma and allergies are more likely to develop atopic dermatitis than children of parents without allergic diseases. Approximately 30 percent of children with atopic dermatitis have food allergies, and many develop asthma or respiratory allergies. People who live in cities or drier climates also appear more likely to develop the disease.

The condition tends to worsen when a person is exposed to certain triggers, such as:

- Pollen, mold, dust mites, animals, and certain foods (for allergic individuals)
- Cold and dry air
- Colds or the flu
- Skin contact with irritating chemicals
- Skin contact with rough materials such as wool
- Emotional factors such as stress
- Fragrances or dyes added to skin lotions or soaps.

Taking too many baths or showers and not moisturizing the skin properly afterward may also make eczema worse.
Symptoms

Atopic dermatitis is characterized by red and itchy dry skin. Itching may start before the rash appears and sometimes can be intense. Persistent scratching of itchy skin can lead to redness, swelling, cracking, weeping of clear fluid, crusting, and scaling.

Both the type of rash and where the rash appears depend on a person’s age.

- Infants as young as 6 to 12 weeks develop a scaly rash on their face and chin. As they begin to crawl and move about, other exposed areas may be affected.

- In childhood, the rash begins with bumps that become hard and scaly when scratched. It occurs behind the knees; inside the elbows; on the wrists, ankles, and hands; on the sides of the neck; and around the mouth. Constant licking of the lips can cause small, painful cracks in the skin.

- In some children, the disease goes into remission for a long time, only to come back at the onset of puberty when hormones, stress, and the use of irritating skin care products or cosmetics may cause the disease to flare.

- Some people develop atopic dermatitis for the first time as adults. The rash is more commonly seen on the insides of the knees and elbows, as well as on the neck, hands, and feet. The symptoms can be localized or widespread throughout the body.

- During a severe flare-up, rashes may occur anywhere on the body.

Diagnosis

If your doctor suspects that you have atopic dermatitis, he or she may

- Perform a physical exam and specifically inspect the appearance of the skin.

- Take a personal and family history.

- Perform a skin biopsy (the removal of a small piece of skin for examination) to confirm the diagnosis or to rule out other causes of dry, itchy skin.

- Perform allergy skin testing, which may be helpful for individuals with hard-to-treat atopic dermatitis or who have symptoms of other allergic diseases.