A topic dermatitis (AD), also known as eczema, is a chronic condition in which the skin becomes dry, resulting in itchiness, redness and swelling. While the exact cause of AD is unknown, it is believed to result from a combination of genetic, environmental and immune-system factors in people who have an "atopic tendency." This means that they are more likely to develop any one (or all) of three closely linked medical conditions: AD, asthma and hay fever.

AD tends to run within families, so parents, children and siblings may all be affected. The condition can lead to recurring bacterial infections caused by persistent itching around skin breaks. As with other skin conditions, AD can have a serious impact on an individual’s quality of life.

There is quite a lot of variation in the appearance of AD in different age groups and among individuals. In general, though, AD occurs in particular patterns on the body according to the age of the individual.

**Infants**
AD most commonly arises in young infants between the ages of three and six months. It may first appear as a rash on the scalp, cheeks, arms and legs, and tends to become widespread. The skin becomes dry and scaly, leading to significant itching.

Treatment involves rehydrating...
the skin by bathing the child in lukewarm water and moisturizing the skin immediately after a bath with an emollient. Topical corticosteroids can be prescribed for babies whose condition does not respond to good skin care and the use of emollients.

**Toddlers and children**

As children begin to acquire motor skills and move around, the affected areas become more localized. In this age group, the creases of the elbows, knees, ankles and wrists are most likely to be involved. Other areas also include the eyelids and neck. Skin thickening, also known as lichenification, may occur as a result of constant scratching of the itchy skin; a child’s skin can also lighten or darken in the areas affected by AD.

Good news: AD often improves during the school years, and may even have cleared up completely by the teenage years. Treatment includes good skin care, including lukewarm baths and emollients. Medications, including topical corticosteroids and topical calcineurin inhibitors, can be prescribed for youngsters whose signs and symptoms do not improve with basic skin care. A new medication, crisaborole, is now available for use in children of two years and older with mild to moderate AD. Crisaborole is a topical treatment that is applied to the affected area of the skin to manage symptoms such as itching and to reduce inflammation.

**Adults**

Most people who have AD as a child find the condition resolves by early adulthood. However, 10–30 per cent of individuals continue to have signs and symptoms in adulthood. Adults who live with AD tend to have dry and lichenified skin, and the AD often affects the nape of the neck, hands and eyelids. Because the skin barrier is affected, adults can often experience recurrent bacterial infections.

Adults with AD should practice good skin care, including moisturizing and using mild soaps. Prescription medications include topical corticosteroids and topical calcineurin inhibitors. If these treatments fail to improve the symptoms of AD then the use of immunomodulators can be explored. Immunomodulators are systemic treatments, which means they work on the whole body and not just on a single area.

In 2017, the immunomodulator dupilumab was approved for use in adults with moderate to severe AD. Dupilumab is a type of protein that helps decrease or stop the immune response, resulting in fewer symptoms of AD.

**The right treatment for you**

As with any medication, a number of factors must be taken into consideration before starting treatment. Your health-care provider will assess the severity of your AD and the presence of any other medical conditions, together with your personal preferences and needs. If you are pregnant or breastfeeding then this will also affect the treatments you will be able to receive.

The risks and benefits of all medication options should be explored. Work with your health-care provider to determine the most effective AD treatment for you.

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**Insight sources:** Eczema Society of Canada

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**CSPA SURVEY:**

**The Skin I’m In**

To better understand how individuals with AD and their caregivers are affected by this condition, the CSPA developed the Atopic Dermatitis Patient Experience survey. In November 2017, the survey was distributed through social media strategies designed to target Canadians affected by AD. The resulting report, which adds to the body of knowledge on the patient journey, can be read at canadianskin.ca/adreport.