

Atopic Dermatitis (A Type of Eczema)

Diagnosis and Management in Primary Care



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~16.5 million adults

have atopic dermatitis in the United States

6.6 million

have moderate to severe disease

Atopic dermatitis (AD) is a chronic, non-contagious immunological disease in which skin becomes dry, discolored, and itchy. Often referred to as eczema, **AD is only one of several conditions considered to be eczema.** AD can be present at every age, but is most commonly found in children. It is important to understand that AD is a systemic disease and is affected by an individual's unique genetics, microbiome, and environmental factors.



Common Signs & Symptoms

- Dry, itchy skin (itching may be severe)
- Thickened, leathery, cracked, or scaly skin
- Skin with small, raised bumps, which may leak fluid and crust over when scratched
- Discolored skin
 - Lighter skin tones — patches may be red.
 - Darker skin tones — patches may appear more hyperpigmented, with erythema often appearing brown, purple, or gray. Lesions are often more papular and appear on extensor surfaces.

AD typically appears around the eyes, neck, knees, elbows, hands, and feet, and symptoms tend to flare periodically.

Repeated scratching that breaks the skin can lead to complications, such as sores, pain, and increased risk of skin infection.

Risk Factors

While the exact cause of AD is unknown, there are known genetic components to the disease. The primary risk factors for AD include:

- Family history of AD, hay fever, or asthma
- Personal history of hay fever or asthma
- African American or Hispanic race/ethnicity
- Exposure to environmental factors (e.g., air quality/humidity, soap, clothing)

Stress, anxiety, and emotional disorders may also worsen AD symptoms.

Impacts of Atopic Dermatitis

Prevalence of AD appears to be similar in male and female children; however, **more adult women have AD than men.** Research also suggests that women tend to experience more severe symptoms and negative impacts on quality of life. Women who care for children with AD can also experience financial burden and psychosocial sequelae.

AD symptoms can be very disruptive to daily activities and quality of life.



Severe itching can interfere with sleep, which can have lasting consequences on overall health.



The appearance of AD can affect mental health and social well-being. Up to one half of adults with AD avoid social interactions because of their appearance.



Individuals with AD are at a higher risk for anxiety and depression (risk increases with advanced AD severity).



Childhood AD may have significant influences on the emotional and social well-being of the child, their parents and/or caregivers. This may be particularly impactful for parents of children with AD who also have AD themselves.



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Diagnosis & Treatment



Diagnosis of AD can typically be completed through a visual assessment of the skin for characteristic attributes of AD and review of a patient's medical history. Additional testing (e.g., patch test, blood test, biopsy) may be used to rule out other conditions.

It is important to keep in mind that the appearance of symptoms, especially discoloration, may be different for different skin tones.

While there is no cure for AD, there are a number of treatments available for managing symptoms. Given the complex and persistent nature of this systemic disease, AD may require multiple treatments, different treatments over time, or changes in treatment in response to flares. **A personalized approach that centers around patient understanding and input is crucial for effective treatment.**

At-home Care

Ongoing management of mild to moderate symptoms will likely require lifestyle adjustments and routine care practices, such as:

- Identifying and avoiding environmental and contact irritants (e.g., perfumed soaps, tight or scratchy clothing) or allergens such as dust mites, animal dander, pollen, and mold
- Identifying and eliminating food allergens
- Taking short, warm baths or showers
- Routinely moisturizing affected areas
- Applying topical anti-itch products (e.g., hydrocortisone)
- Taking an oral allergy or anti-itch medication (e.g., antihistamine, diphenhydramine)

References

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Eczema Stats. National Eczema Association. <https://nationaleczema.org/research/eczema-facts/> Accessed 13 Sep 2021.

Silverberg JI, Gelfand JM, Margolis DJ, et al. Patient burden and quality of life in atopic dermatitis in US adults: A population-based cross-sectional study. *Ann Allergy Asthma Immunol.* 2018;121(3):340-347.

Additional Resources

Autoimmune Association: <https://autoimmune.org/>

National Eczema Association: <https://nationaleczema.org/>

National Institute of Allergy and Infectious Diseases (NIH/NIAID): <https://www.niaid.nih.gov/diseases-conditions/eczema-atopic-dermatitis> above NIH/NIAMS

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIH/NIAMS): <https://www.niams.nih.gov/health-topics/atopic-dermatitis/advanced>

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Medical Therapies

- **Corticosteroid** topical creams, ointments, or pills to reduce inflammation
- **Nonsteroidal** ointments or creams to control flares and reduce the immune response associated with AD
 - Calcineurin inhibitors
 - Phosphodiesterase inhibitors
 - JAK inhibitors
- **Antibiotic** topical creams or pills to treat an active bacterial infection in the skin
- **Monoclonal antibody** injections to reduce itch and inflammation
- **Phototherapy** uses localized or widespread ultraviolet light to reduce itch and inflammation



Long-term corticosteroid use followed by cessation can lead to Topical Steroid Withdrawal, a serious consequence that may result in a variety of symptoms, including flares with symptoms more severe than the initial AD condition.

Protecting Patient Mental Health & Wellness

Speaking with a trained mental health professional may help patients cope with the mental and emotional aspects of living with a chronic skin condition like AD. Relaxation and biofeedback are also some recommended methods to assist patients to manage stress and habitual scratching associated with AD.

When to Refer to a Specialist

Patients should be referred to a dermatologist or allergist/immunologist once there is plausible suspicion of atopic dermatitis. A dermatologist and/or allergist will have the expertise to diagnose, treat, and counsel patients to manage their AD.