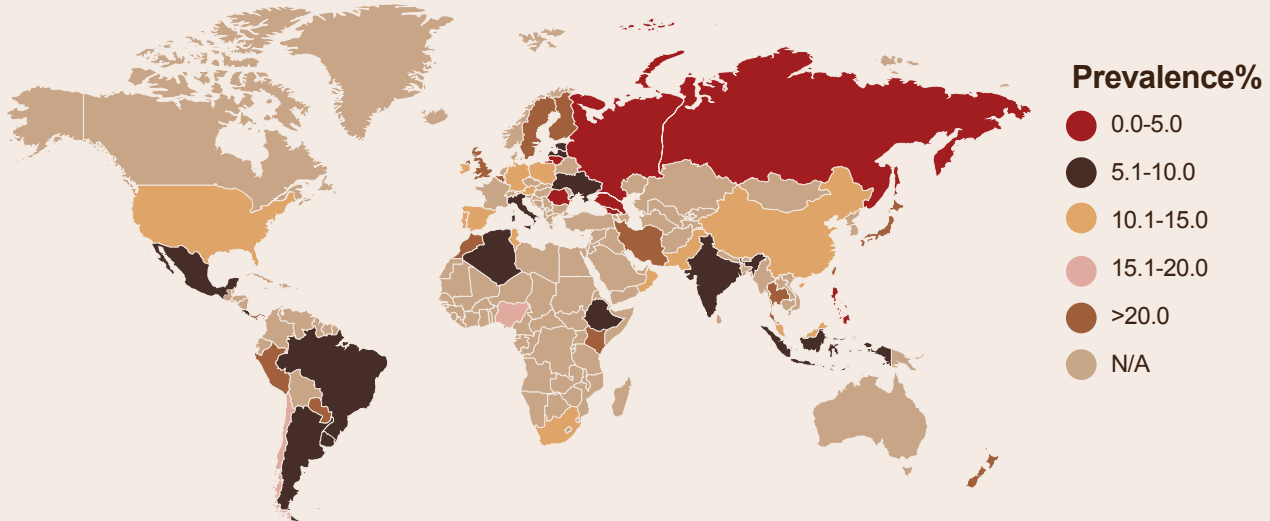


Atopic Dermatitis: A Global View of Diagnosis

How Common Is Atopic Dermatitis? A Snapshot of Global Prevalence



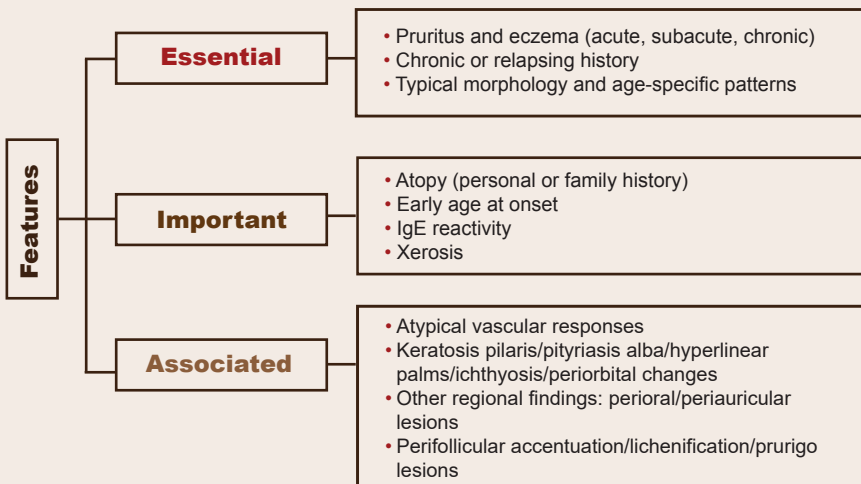
230M
People affected
worldwide

15%-20%
in children

1%-10%
in adults

80%
have onset prior
to 6 years old

Is It Atopic Dermatitis? AAD 2014 Diagnostic Guidelines



Photographic Examples of AD



Atopic Dermatitis: A Global View of Diagnosis (CONT)

Frequency of Specific Clinical Features by Region

Feature	Europe	Middle East
Flexural involvement	58%	10%
Head and neck	35%	72%
Hand and foot	42%	–
Nummular lesions	11%	6%
Prurigo nodules	4%	4%
Papular lichenoid lesions	1%	46%
Perifollicular accentuation	28%	5%

Feature	USA
Flexural involvement	54%
Head and neck	58%
Hand and foot	43%
Nummular lesions	6%
Perifollicular accentuation	5%

Feature	Africa
Flexural involvement	65%
Head and neck	61%
Hand and foot	20%
Papular lichenoid lesions	54%

Feature	East Asia	Southeast Asia
Flexural involvement	63%	64%
Head and neck	49%	16%
Hand and foot	29%	37%
Nummular lesions	16%	21%
Prurigo nodules	8%	27%
Papular lichenoid lesions	12%	–
Perifollicular accentuation	43%	27%

Feature	India
Flexural involvement	59%
Head and neck	37%
Hand and foot	18%
Perifollicular accentuation	35%



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Atopic Dermatitis Presentation: Variations in Skin of Color

Patients with skin of color, particularly Black patients and Asian patients, may present with different clinical features of AD compared with White patients:

Asian Patients



- More well-demarcated lesions, scaling, and lichenification relative to White patients
- Extensor involvement more common relative to White patients
- Erythrodermic AD more common in adolescents and adults in East Asia, particularly those with a longer disease course

Black Patients



- Less flexural; greater extensor involvement relative to White patients
- Hyper/hypopigmentation, perifollicular accentuation, lichen planus-like presentation
- Erythema may appear violaceous and can be easily missed
- Presence of edema, warmth, or scale can help identify underlying erythema

Atopic Dermatitis Presentation: Variations by Age



Infants + Toddlers (0-2 years)

Face, scalp, and extensor surfaces; often weepy, crusted, or vesicular

Can initially manifest with flexural lesions



Children + Adolescents (≥2-16 years)

Favors antecubital and popliteal fossae, neck, dorsal feet
Evolving toward adult form with more lichenification and ill-defined plaques

Occasionally, a “dirty neck” is observed in adolescents



Late Teens + Adults (>16 years)

Characterized by pronounced clinical heterogeneity

Forms of presentation specific to adults include head-and-neck dermatitis, chronic eczema of the hands, multiple areas of lichenification, or prurigo lesions

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Differential Diagnoses by Age



Infants + Toddlers 0-2 years

- Seborrheic dermatitis
- Ichthyosis vulgaris
- Scabies
- Psoriasis
- Phenylketonuria
- Ectodermal dysplasia
- Celiac disease
- IgA deficiency
- DiGeorge syndrome (22q11.2 deletion)
- DOCK8 deficiency syndrome
- Agammaglobulinemia
- Netherton syndrome
- Wiskott-Aldrich syndrome



Children + Adolescents ≥2-16 years

- Tinea manuum or tinea pedis
- Impetigo
- Psoriasis
- Pityriasis rosea

Conditions listed for infants and toddlers that might not have been diagnosed early in life



Late Teens + Adults >16 years

- Allergic contact eczema
- Psoriasis
- Pityriasis rosea
- Cutaneous T-cell lymphoma
- Pityriasis rubra pilaris
- Asteatotic eczema
- Netherton syndrome

Region-Specific Considerations



Latin America

Scabies, papular urticaria, and helminth infections (which can be associated with rashes) are more frequent in some communities



Sub-Saharan Africa:

Major differential diagnoses may include scabies, insect bites, actinic lichen planus, HTLV-1 infective dermatitis, and HIV infection— and AIDS-related skin changes

Atopic Dermatitis: A Global View of Diagnosis (CONT)

Abbreviations:

AAD: American Academy of Dermatology; AD: atopic dermatitis; EASI: Eczema Area and Severity Index; HTLV-1: human T-lymphotropic virus 1.

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