

# Medical Reference: Skin Redness (Erythema)

## 1. Condition Overview

**Name:** Skin Redness (Erythema/Facial Flushing) **Definition:** Skin redness, or erythema, is a clinical symptom characterized by the increased flow of blood to the superficial capillaries in the dermis. This occurs due to vasodilation—the widening of blood vessels—often as a response to inflammation, injury, or external stimuli. While temporary redness is a normal physiological response, persistent redness may indicate a compromised skin barrier, Rosacea, or chronic sensitivity.

**Who is commonly affected:** Redness can affect all skin types. In lighter skin tones (Fitzpatrick I–II), it appears as pink or bright red patches. In deeper skin tones (Fitzpatrick V–VI), redness may appear as purple, dark brown, or a subtle "warmth" in the skin that is harder to detect visually but can be felt as heat or tenderness.

## 2. Visual Severity Mapping

The following numerical scores categorize the intensity and persistence of the vascular response:

- **Mild (0–30):** Temporary redness that occurs after exercise, heat exposure, or emotional stress and subsides quickly. The skin texture is normal, and there is no stinging or burning sensation.
- **Moderate (31–60):** Persistent redness localized to the cheeks, nose, or chin. The skin may feel warm to the touch. Visible tiny blood vessels (telangiectasia) may begin to appear. Certain skincare products cause a brief stinging sensation.
- **Severe (61–100):** Intense, permanent redness that does not fade. The skin feels hot, tight, and painfully sensitive. Significant visible "spider veins" are present. The skin may appear swollen or develop bumps (papulopustular redness), often indicating advanced Rosacea or severe barrier dermatitis.

## 3. Common Triggers

- **UV Radiation:** Sun exposure triggers inflammatory cytokines and dilates blood vessels.
- **Temperature Extremes:** Rapid shifts from cold wind to indoor heating, or very hot showers.
- **Dietary Stimulants:** Spicy foods, caffeine, and alcohol (especially red wine) cause rapid vasodilation.
- **Harsh Ingredients:** High concentrations of Alcohol Denat., Menthol, Fragrance, or Essential Oils.
- **Physical Friction:** Over-scrubbing with washcloths, loofahs, or granular exfoliants.
- **Emotional Stress:** The "fight or flight" response triggers a rush of blood to the face.
- **Over-Exfoliation:** Using too many active acids (AHA/BHA) or retinoids at once, stripping the protective barrier.

## 4. Evidence-Based Care Guidelines

### Mild Care (Score: 0–30)

- **Soothing Cleansing:** Use a non-foaming, milk-based cleanser that does not disrupt the skin's pH.

- **Calming Ingredients:** Use serums with Centella Asiatica (Cica), Mugwort, or Panthenol (Vitamin B5) to reduce minor irritation.
- **Physical Sunscreen:** Opt for mineral sunscreens (Zinc Oxide or Titanium Dioxide) as they reflect heat and are less irritating than chemical filters.
- **Thermal Water:** Use a mineral water spray to cool the skin surface throughout the day.

## Moderate Care (Score: 31–60)

- **Barrier Repair:** Use creams containing Ceramides and Cholesterol to seal the "cracks" in the skin barrier that allow irritants in.
- **Azelaic Acid:** Use 10% Azelaic acid to reduce visible redness and calm the inflammatory response.
- **Green-Tinted Correctors:** Use color-correcting primers to neutralise the visual appearance of redness using complementary color theory.
- **Niacinamide (Low %):** Use 2%–5% Niacinamide to strengthen the skin's immunity and reduce blotchiness.

## Severe Care (Score: 61–100)

- **Vascular Lasers:** Professional treatments such as Pulse Dye Laser (PDL) or Intense Pulsed Light (IPL) to collapse the dilated capillaries causing the redness.
- **Prescription Topicals:** Consultation for Metronidazole or Ivermectin creams if the redness is diagnosed as Rosacea.
- **Brimonidine Gel:** A prescription-only vasoconstrictor that provides temporary (12-hour) relief from extreme flushing.
- **Dermatological Assessment:** Mandatory check to rule out systemic conditions like Lupus (indicated by a "butterfly" rash) or severe allergic contact dermatitis.

## 5. Do's and Don'ts

### Do

- **Patch Test:** Always test new products on the jawline for 24 hours to check for reactive flushing.
- **Keep Skincare in the Fridge:** Applying chilled products helps constrict blood vessels and soothe heat.
- **Use Lukewarm Water:** Wash your face with water that is close to room temperature.
- **Check the Weather:** Wear a scarf or face mask in winter to protect skin from "windburn."

### Don't

- **Use Physical Scrubs:** Avoid all gritty exfoliants; they cause micro-tears and worsen redness immediately.
- **Apply Pure Essential Oils:** Oils like Cinnamon, Clove, or even concentrated Peppermint can cause chemical burns on sensitive skin.
- **Use Hot Steam:** Avoid facial steamers or saunas, which significantly increase facial blood flow.
- **Ignore the Burning:** If a product stings for more than 30 seconds, wash it off immediately—it is a sign of a compromised barrier.