

Radiation effects are categorized as acute and chronic. Acute effects on the skin include initial redness (week 1), hair loss (10–14 days), severe redness and swelling (week 2), dryness and peeling (weeks 3–4), and potentially radiation burns. Chronic effects involve skin discoloration, atrophy, thickening, ulceration, and potential cancerous transformation. Radiation also affects sweat and sebaceous glands, causing atrophy and reduced skin strength. Nails become rough and brittle. Treatment involves preventative measures (avoiding irritants) and curative treatments (lotions, gauze, antibiotics, or grafting for severe burns and ulcers). Mucous membranes experience acute effects like dryness, pain, and difficulty swallowing or urinating, with chronic effects including fibrosis, narrowing of channels, and potential cancerous ulcers. Radiation's impact on blood and bone marrow includes cessation of cell division, altered blood cell counts, and marrow atrophy at lethal doses (4500 rad