annually by dermatoses. The same investigator found chemical burns and dermatitis in 16 per cent of the 2,500 workers employed in a dyeing establishment, while the frequency of such cutaneous lesions was as high as 50 per cent among the workers of a plant in which synthetic waxes and resins were handled. In an analysis of 9,116 cases of occupational dermatoses reported to the United States Public Health Service, Schwartz noted that 4.3 per cent of the cases had occupational contact with dyes and dye intermediates (exclusive of fur dyes); 2.8 per cent were exposed to rubber and its compounds; 1.1 per cent handled furs and fur dyes; 1.1 per cent were exposed to miscellaneous coal tar products, making a total of 8.3 per cent (843 cases) of the total number of industrial dermatoses possibly caused by contact with aromatic compounds. Regarding the frequency of such reactions among skin diseases in general, Ingram observed that there were 30 cases of dye dermatitis (12 from the use of hair dyes, 7 from contact with fur dyes, 11 by exposure to fabric dyes) among 12,000 cases of skin diseases of various types.

Among the various dyes which may act as skin irritants or sensitizers, the ursol dyes (para- and meta-phenylenediamine and derivatives) that are used extensively in dyeing furs, are most prominent, because a congenital hypersensitivity against these substances is relatively common (Mayer). Downing stated that one out of 100 individuals is allergic against ursol dyes, while Ingram found through patch tests performed routinely on 1,000 patients that even 4 per cent of the examined persons showed positive reactions to these compounds. Because of this fact various associations of cosmetic manufactures decided to refuse membership to firms using ursol compounds in hair dyes (Downing). A relatively frequent source of dye dermatitis has been dyed leather, particularly the straps of wrist watches, dyed with oil yellow T (amido-azotoluene hydrochloride) (Schwartz), while the chemically closely related aniline dyes, oil yellow OB (orthotoluene-azo-beta-naphthylamine), oil yellow AB (benzene-azo-beta-naphthylamine), and ortho-toluene-azo-beta-naphthol, which have been employed extensively during recent years to color Florida oranges, have not given rise to a high incidence of dermatitis, according to the information available (Traub, Gordon and Van Dyke; Schwartz). There exists a limited number of cases of dye dermatitis among handlers and consumers of numerous dyed articles such as fabrics, furs, shoes, hosiery, foodstuffs, skin creams, nail dyes, eye brow pencils, lipsticks, and rouges which were caused by a congenital or acquired hypersensitivity to the particular dyes or groups of dyes and which resulted from a cutaneous or alimentary contact with these substances (Simon and Rackemann; Bonnevie and Genner; Blumenthal and Jaffé; Baer; Schwartz; Criep; Mackenna; Bloch; Lewis; Stauffer; Grasreiner; Anderson and Ayres; Lanzenberg; Beerman; Ingram; Niles; Ramond and others).