



## Safety hazards with permanent and semi permanent hair dyes

Permanent hair dyes are more sensitizing compared to other types of hair dye.

The chemicals can induce a form of dermatitis (a contact dermatitis) in people with sensitive skin. Sensitization to a hair dye does not often occur, but it can and does happen. In most cases the reaction to the dye is one of itching and some skin redness, but nothing more. In more severe cases the hair dye may triggers scaly skin and pain.

The distribution of the affected skin can vary and the affected area does not have to match the exact area to which the dye was applied. In more severe cases there can be swelling around the eyes and scaly skin on the ears, face and neck beyond the actual skin exposed to the hair dye. Sensitization to hair dye may gradually develop with repeated exposure.

Coal tar hair dye ingredients are known to cause allergic reactions in some people, FDA's Lambert says. Synthetic organic chemicals, including hair dyes and other color additives, were originally manufactured from coal tar, but today manufacturers primarily use materials derived from petroleum. The use of the term "coal tar" continues because historically that language has been incorporated into the law and regulations.

The law does not require that coal tar hair dyes be approved by FDA, as is required for other uses of color additives. In addition, the law does not allow FDA to take action against coal tar hair dyes that are shown to be harmful, if the product is labeled with the prescribed caution statement indicating that the product may cause irritation in certain individuals, that a patch test for skin sensitivity should be done, and that the product must not be used for dyeing the eyelashes or eyebrows. The patch test involves putting a dab of hair dye behind the ear or inside the elbow, leaving it there for two days, and looking for itching, burning, redness, or other reactions

- While PPD dyes are rare in **clothing**, other dyes that may react like PPD (cross-react) may be present. As a result, some PPD-sensitive patients cannot wear dark clothing; especially clothing made of synthetic fibers like polyester or nylon.
- About 25% of PPD sensitive people are also allergic its chemical relatives like procaine and benzocaine, found in certain local anesthetics and haemorrhoid creams, sulfa drugs and para-aminobenzoic acid (PABA) – found in sunscreens

If you are sensitive or allergic to any products our suggestion is to do a "patch" test first with any new products that come into contact with your skin