

Communication 058/2026

06 October 2026

Contact allergies caused by textiles: less common than previously thought

At European level, the potential health risks posed by chemicals in clothing is subject to growing discussion. Specifically, this concerns a far-reaching restriction on skin-sensitising substances – that is, chemicals that can trigger a contact allergy and, consequently, allergic contact dermatitis in some individuals. Any decision regarding a potential restriction, along with the required balancing of different factors, should be predicated on a highly realistic assessment of the actual health risk.

An estimate performed several years ago calculated that on an annual basis 0.9% of the general population in Europe suffers from allergic contact dermatitis caused by chemicals in clothing. The German Federal Institute for Risk Assessment (BfR) has now analysed clinical epidemiological data from Germany, Austria and Switzerland in a new, comprehensive evaluation. This evaluation indicates that the occurrence of textile-related allergic contact dermatitis affects approximately 0.008 to 0.07% of the population – it is therefore rare.

Consequently, the expected health benefits of restricting all substances with a harmonized classification (in the EU) as skin sensitizer in textiles may be less than anticipated.

Some chemical substances used in textiles can trigger allergic contact dermatitis in sensitised individuals. Dyes, particularly disperse dyes, are the main cause, whereas finishing agents such as formaldehyde-based resins, used for crease resistance and for the improvement of dimensional stability, no longer play a significant role as allergens.

In order to assess the prevalence of allergic contact dermatitis caused by dyes in textiles, the so-called CE-DUR approach was used for the BfR study. This approach combines clinical-epidemiological data (test results from patients) with methods from drug-utilisation research to infer the frequency of a condition in the general population. In this specific case, the results of patch tests (a medical skin test for the detection of contact allergies) carried out on patients with inflammatory skin conditions were linked to the annual sales figures for

the standard patch test series in Germany. The CE-DUR approach has been used repeatedly in the past to estimate the prevalence of contact allergies to the most relevant allergens (e.g. nickel) in the general population. This method allows reliable figures to be determined, even when specific representative population studies are unavailable.

The analysis was applied to publicly available data for Germany, Austria and Switzerland published by the Information Network of Dermatological Clinics (IVDK). In the participating clinics, people seeking medical help for skin problems are regularly tested for contact allergies. Among them is a small group in whom clothing or textiles are suspected of triggering the symptoms. These individuals were patch tested using a special series for textile dyes and, in some cases, with samples of their own clothing. Using the CE-DUR approach, the proportion of positive reactions can then be extrapolated to estimate how many people in Germany might be affected. This extrapolation was further supported by an additional evaluation of the number of medical diagnoses of allergic contact dermatitis reported for billing purposes to health insurance funds.

The full study has been published in the journal *Archives of Toxicology* and is available here: <https://doi.org/10.1007/s00204-026-04556-z>

Further information on Allergies and Textiles:

Allergies: The most important questions and answers at a glance

<https://www.bfr.bund.de/en/service/frequently-asked-questions/topic/allergies-the-most-important-questions-and-answers-at-a-glance/>

Health assessment of Textiles

<https://www.bfr.bund.de/en/product-safety/health-assessment-of-textiles/>

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