

Nickel allergy following EU regulation - more action is needed

DOI: 10.1111/bjd.12537

ORIGINAL ARTICLE, p 854

The occurrence of nickel allergy is decreasing in the young female population following a European Union regulation limiting nickel release. This is shown in the study by Garg *et al.*¹ in this issue of the British Journal of Dermatology. Patch-test data from more than 180 000 patients with dermatitis in Denmark, Germany, Italy and the U.K., between 1985 and 2010, are analysed. The trend of nickel allergy is described by country, sex and age groups. The overall frequency of nickel allergy during the period was lowest in Denmark (17.4% in women and 3.1% in men) and highest in Italy (31.9% in women and 10.8% in men). The authors conclude that the downward trend is encouraging, but also that more work is needed for reduction of nickel allergy. This is fully agreed.

Scientific surveys in many countries show that the market is full of articles that release too much nickel, and that adaptation to the regulation is generally poor. This is the responsibility of manufacturers, importers and retailers, while authorities have the role of controlling compliance with the regulation. Efficient control and enforcement would most likely result in reduced risks to consumers. Contact dermatitis experts can influence authorities and their priorities by informing them about nickel allergy and its consequences.

When the Nickel Directive was adopted, it was assumed sufficient to reduce nickel exposure from items such as jewellery, watches, spectacle frames and buttons – the most evident causes of nickel allergy. However, the regulation is not protective enough. Some improvements have been introduced, as mentioned by Garg *et al.*¹ Multiplication ('adjustment') by 0.1 of the analytical nickel release result for showing compliance with the regulation was allowed according to the first version of the reference test method – EN 1811:1998. This has been omitted in the current EN 1811:2011 standard, resulting in better protection. The European Commission has explained that mobile telephones are in prolonged contact with skin and thus covered by the restriction. However, 'prolonged contact' is not defined in the regulation, and the European Chemicals Agency is currently working on the definition. The amount of

nickel deposited onto the skin can now be quantified,^{2,3} and it has been shown that items with relatively short and repetitive skin contact, such as coins, keys, handles and tools, cause significant nickel exposure and nickel dermatitis.^{4,5} It would therefore be most relevant to include such exposure in the restriction.

What can the practising dermatologist do, awaiting actions by authorities and industry? All patients with nickel allergy should be encouraged to use the dimethylglyoxime test to identify nickel-releasing items, and to avoid skin contact with these.⁵ It is of great interest that practitioners publish clinical reports on nickel dermatitis, so that new risks are revealed and preventive measures taken. Continuous contributions to national databases on patch-test results are essential for identification of new risks, surveillance, and validation of interventions. The current publication by Garg *et al.*¹ is an excellent example.

Conflicts of interest

None declared.

Institute of Environmental Medicine,
Karolinska Institutet, Box 210, SE-171 77,
Stockholm, Sweden
E-mail: carola.liden@ki.se

C. LIDÉN

References

- 1 Garg S, Thyssen JP, Uter W *et al.* Nickel allergy following EU regulation in Denmark, Germany, Italy and the U.K. *Br J Dermatol* 2013; **169**:854–58.
- 2 Gawkrödger DJ, McLeod CW, Dobson K. Nickel skin levels in different occupations and an estimate of the threshold for reacting to a single open application of nickel in nickel-allergic subjects. *Br J Dermatol* 2012; **166**:82–7.
- 3 Lidén C, Skare L, Nise G, Vahter M. Deposition of nickel, chromium, and cobalt on the skin in some occupations – assessment by acid wipe sampling. *Contact Dermatitis* 2008; **58**:347–54.
- 4 Julander A, Midander K, Herting G *et al.* New U.K. nickel-plated steel coins constitute an increased allergy and eczema risk. *Contact Dermatitis* 2013; **68**:323–30.
- 5 Jensen P, Thyssen JP, Johansen JD *et al.* Occupational hand eczema caused by nickel and evaluated by quantitative exposure assessment. *Contact Dermatitis* 2011; **64**:32–6.