

## Optical radiation - Report on activities in Sweden

### Research activities related to optical radiation and health

#### *Ultraviolet radiation*

The Swedish Radiation Safety Authority's (SSM) scientific council on UV and health gives advice in areas relating to the connection between UV and biological effects. The work of the council provides the authority a foundation that assures scientifically based recommendations to the public.

The council summarises recent research in a report yearly (in Swedish). The council consists of experts in the fields of dermatology, epidemiology, meteorology and marketing communication, occasionally supplemented with adjuncts members to cover complementary areas of knowledge. A permanent feature in the annual report is a summary of the incidence of the three main forms of UV-related skin cancer. Other topics in this year's report is an overview of research in UV-radiation and eye health, and the introduction of teledermatoscopy as a tool in healthcare and secondary skin cancer prevention.

### New relevant policies and legislations

#### *Sun-beds*

The proposal for a revised Swedish regulation for artificial tanning devices previously (2023) notified to the EU has been subject to request for clarification. Tanning beds are included in the (list of) products that are part of a harmonized market, and are therefore subject to notification<sup>1</sup>. The request concerned mainly the proposed ban on selling cosmetic products intended for use on the skin prior to tanning at sun-bed facilities. The main reason for the revision is that the current regulation is out of date. The revision include a general update in relation to other regulations and standards and new regulations in particular for service and provision of sun-beds.

Sweden takes part in the European Commission project "Europes beating cancer plan"<sup>2</sup>. The plan comprise a selection of actions to decrease skin cancer incidence, among them how to limit UV-exposure from artificial tanning devices. There is an expert group on cancer (PHEG<sup>3</sup>), appointed to discuss measures to limit UV exposure from artificial tanning devices in the light of the SCHEER report<sup>4</sup>. In Sweden, the Swedish National Board of Health and Welfare is co-ordinating this work with attendance from the SSM and Elsäkerhetsverket (the latter with responsibility for regulations implemented in Swedish legislation as a consequence of the low voltage directive<sup>5</sup>). Initially the work of the sub-group has focussed on summarising the scientific data that has emerged after the SCHEER report and a survey of the current legislation in the participating countries. This work is expected to lead to a recommendation for how health risks in connection with artificial tanning devices can be reduced.

#### *Cosmetic treatments*

In Sweden, practitioners performing cosmetic treatments involving non-ionizing radiation outside of medical care do not need a permit nor do they need to notify their business to an authority. However, they must comply with the Swedish Radiation Protection Act, which essentially states that such activities must take necessary precautions to prevent or mitigate harm to human health or the

<sup>1</sup> Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations.

Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market.

<sup>2</sup> Europes beating cancer plan: [eu\\_cancer-plan\\_en 0.pdf \(europa.eu\)](https://ec.europa.eu/health/eu_cancer_plan_en)

<sup>3</sup> Sub-group on Cancer under the Public Health Expert Group

<sup>4</sup> SCHEER (Scientific Committee on Health, Environmental and Emerging Risks), Opinion on Biological effects of ultraviolet radiation relevant to health with particular reference to sunbeds for cosmetic purposes, 17 November 2017 (online 2016): Biological effects of ultraviolet radiation relevant to health with particular reference to sunbeds for cosmetic purposes (europa.eu)2016

<sup>5</sup> Directive 2014/35/EU [Low Voltage Directive \(LVD\) - European Commission \(europa.eu\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0035)

environment. The number of operators in this field has increased, leading to increasing numbers of adverse reactions reported by clients. This is mainly due to operators' lack of competence regarding the equipment they use but there is also unawareness of the regulations to follow. The SSM can supervise these activities to ensure compliance with the law from a radiation safety perspective. However, since there is no notification obligation, effective supervision is challenging. Currently the selection of operators to inspect is based mainly on reports of misconduct and/or adverse health reactions, received by the authority.

SSM is currently developing new regulations in the area of cosmetic treatments. A first step is to introduce a notification obligation for operators, which would enable supervision. Prior to and alongside the introduction of the notification obligation, there are plans to reach out to operators with information. Efforts are underway to determine the most effective ways to disseminate this information

### New communication activities

A former government assignment concerning skin cancer prevention given to the authority in 2019 was finalised in March 2024. The main purpose was to influence exposure habits with information and advice. The project has received a permanent continuation. Main participants will continue to be the other relevant authorities on national and regional level. The SSM will co-ordinate relevant authorities and organisations in this work. Apart from regular campaigns directed towards the public, this work has brought recommendations for community planning, information on exposure in medical on-line web services and course material for preschool teachers and childcare staff.