



2025 Optical radiation – Report on activities in Sweden

- Research activities related to optical radiation and health

Ultraviolet radiation

The Swedish Radiation Safety Authority's scientific council on UV and health provides expert advice on the biological effects of UV radiation. The work of the council ensures that the Authority's 'public recommendations are based on scientific evidence. The council's experts in dermatology, epidemiology, meteorology and marketing communication publishes a report summarizing recent research every year. A permanent feature in the annual report is a summary of the incidence of the three main forms of UV-related skin cancer. This year's report also highlights trends in UV-exposure in Sweden over time, potential health risks from UVA radiation during cosmetic nail treatments, where young people get information about UV and health, and new Swedish research indicating a decline in malignant melanoma among younger age groups.

Since 2005, public attitudes towards the sun exposure and tanning behaviour have been assessed annually through a survey. Over the past decade, the general trend has shown increased sun protection and a decline in risky sun-related behaviours. However, a recent analysis of the youngest group (18-29) reveals a different pattern: they tend to expose themselves to the sun more frequently, experience sun burns more often, and use tanning beds more than the rest of the population.

Cosmetic treatments

SSM is participating in a new research project initiated by Lund University, aiming to investigate a possible link between cosmetic use of laser and intense pulsed light (IPL) and an increased risk of developing skin cancer. The project is currently in its initial phase. A questionnaire focusing on the use of laser and IPL has been sent to individuals who previously participated in a study on the potential connection between tattoos and cancer, and who indicated that they have undergone laser or IPL treatments.

- New relevant policies and legislations

Sun-beds

The revised Swedish regulation on artificial tanning devices has been finalized and will enter into force on September 15. The update includes general alignment with other relevant regulations and standards, as well as new specific rules concerning the operation and provision of sunbeds. A new provision has also been introduced prohibiting marketing that suggests medical benefits from the use of tanning devices.



Cosmetic treatments

In Sweden, cosmetic treatments involving non-ionizing radiation that are performed outside of medical care are currently not subject to any permit or notification requirements. However, operators are still obliged to comply with the Swedish Radiation Protection Act, which mandates taking necessary precautions to prevent harm.

In recent years the number of operators has increased, as have reports of adverse health effects— often linked to insufficient knowledge of the equipment or relevant regulations.

Due to the absence of a notification requirement, the Swedish Radiation Safety Authority (SSM) is currently limited to supervise, based on reported incidents, which restricts the scope and effectiveness of regulatory oversight.

To address these challenges, SSM has developed new regulations that are currently under public consultation, with the intention of implementing them by the end of the year. The most significant proposed change is the introduction of a notification obligation, requiring operators to register their business with SSM and provide information on the types of radiation and treatments used. This measure is expected to enable more proactive, targeted and effective supervision - ultimately enhancing client safety.

The proposed regulations also include several other requirements, such as mandatory reporting of radiation-related incidents to SSM, providing clients with written risk information, maintaining documented procedures for each type of treatment, and keeping records of all individual procedures performed.

- New communication activities

Skin cancer prevention

The current government initiative on skin cancer prevention was launched in 2024. The Swedish Radiation Safety Authority is responsible for coordinating the efforts of relevant national and regional authorities and organizations. A key objective of the initiative is to influence UV exposure habits by providing targeted information and advice. One of the main activities is the development of a new communication strategy, with a particular focus on young people. Prior to designing the strategy, research was conducted to understand how young people seek and access information.

Cosmetic treatments

SSM's regulations have historically been relatively unknown within the beauty industry. As a result, we identified a clear need to intensify our communication efforts in connection with the public consultation of the new regulations.

In parallel, SSM's supervisory unit launched a new inspection project during the autumn, involving repeated visits to several salons. Unlike the procedure in previous inspections, this initiative focused on a limited set of regulatory requirements, with most of the time dedicated to interviewing operators. The aim was to increase our visibility in the sector, gain a deeper understanding of their day-to-day practices, and identify effective ways to deliver clear and accessible information.



As news have begun to spread about the development of new regulations, interest from the industry is growing significantly. We have actively seized opportunities to appear in beauty-focused magazine articles and podcasts, as well as to participate in beauty fairs and host our own seminar on the subject. Our efforts have generally been very well received. Most reputable industry players view the new regulatory framework positively and welcome the introduction of clearer requirements in the field.