DANISH HEALTH AUTHORITY

DSA Norwegian Radiation and Nuclear Safety Authority

Strål säkerhets myndigheten
Swedish Radiation Safety Authority

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RADIATION AND NUCLEAR SAFETY AUTHORITY

GEISLAVARNIR RÍKISINS
ICELANDIC RADIATION SAFETY AUTHORITY

The Nordic Radiation Safety Authorities advise against using sunbeds

Do not use sunbeds. There is a proven risk of skin cancer associated with using sunbeds, and there is no safe lower limit for exposure to UV radiation from sunbeds.

Background for statement

Ultraviolet (UV) radiation emitted by sunbeds causes tanning but also increases the risk of developing skin cancer. As early as 2005, the Nordic Radiation Safety Authorities of Denmark, Finland, Iceland, Norway and Sweden jointly advised against the use of sunbeds because of the associated health risks. All of the Nordic countries regulate sunbeds as far as concerns technical requirements and radiation limits. Similar to many other European countries, an 18-year age limit is imposed in Iceland, Finland, Norway and Sweden in order to reduce the risk of cancer for the population. Against the background of the proven risk of skin cancer associated with sunbed use, the Nordic Radiation Safety Authorities now reaffirm their previous advice against using these artificial tanning devices.

Proven risk of skin cancer from sunbed use

In 2009 and 2012, the International Agency for Research on Cancer (IARC) reviewed all the evidence concerning the carcinogenic effects of UV radiation from sunbeds and classified the use of UV-emitting tanning devices as carcinogenic to humans (Group 1). In 2016, following a request from the European Commission, the Scientific Committee on Health, Environmental and Emerging Risks (SCHEER) reviewed recent evidence for the purpose of updating its existing opinions on the biological effects of sunbeds. SCHEER concluded that UV radiation, emitted by the sun and sunbeds, is a complete carcinogen, as it acts as both an initiator and a promoter. There is strong evidence to suggest that exposure to UV radiation causes melanoma and squamous cell carcinoma at all ages, and that the risk of cancer is higher when initial exposure occurs at a younger age. There is moderate evidence to suggest that UV exposure also increases the risk of basal cell carcinoma and ocular melanoma. Furthermore, the adverse effects outweigh any beneficial effects of sunbed use. There is no justification to use sunbeds to induce vitamin D production in the skin, as alternative sources of vitamin D are readily available. Finally, there is no threshold level for UV radiant power or UV dose for the

induction of skin cancer, i.e. there is no safe lower limit for exposure to UV radiation from sunbeds. Studies published after 2016 further reinforce previous evidence of a causal relationship between sunbed use and melanoma, as demonstrated by a review conducted by Suppa and Gandini. In 2017, the World Health Organization (WHO) published a booklet intended for policy-makers, summarizing various preventions and control strategies that can be used to reduce the health risks from sunbed use. It is in accordance with the United Nations Sustainable Development Goal (SDG) on good health and well-being.

References

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