May 2024

WHO NIR IAC Committee - Optical radiation (UV, VIS, IR)

Germany - National Report 2024

1. Legislation

Sunbeds: The legal regulations on sunbeds, which have been in force since 2009 (Law on Protection against Non-Ionizing Radiation in Human Applications (NiSG)) and 2012 (Ordinance on Protection against the Harmful Effects of Artificial Ultraviolet Radiation (UVSV)), are still not fully implemented. Consequently, it was decided to tighten the UVSV in 2023. Following consultation with the federal states, a corresponding draft is currently being prepared. Among other things, an exemption paragraph for operators of 2 or fewer sunbeds is to be removed. In addition, Germany is very interested in working with other EU member states to find an EU-wide solution to the sunbed problem.
Cosmetic Use of Non-ionizing radiation: In 2018, the "Ordinance on protection against harmful effects of non-ionizing radiation when used on humans" (NiSV) came into force. The ordinance regulates the commercial operation of laser devices, intensive light sources, high-frequency devices, devices for electrical nerve and muscle stimulation and magnetic field stimulation as well as devices for stimulating the central nervous system and ultrasound devices. Some applications may only be carried out by licensed physicians with appropriate further training and education (physician authorization). The NiSV calls for proof of the relevant specialist knowledge for applications that are not subject to a doctor's authorization. The specific requirements for acquiring the necessary specialist knowledge are set out in the NiSV and in detail in the joint federal and state guidelines (Specialist Knowledge Directive). A current version of the directive was published in 2024. One of the changes concerns the accreditation of training providers which now has to be carried out by an accredited conformity assessment body.

2. UV campaign of the Federal Office for Radiation Protection (BfS)

In April 2023, the Federal Office for Radiation Protection (BfS) launched a UV campaign to provide decision-makers with information and practical tips on UV radiation and UV protection. This campaign is continued in 2024. To support soccer fans and promote the necessary UV protection measures BfS will be setting up 20 sunscreen dispensers in each of the 10 host cities as part of the EURO 2024 European Football Championship in Germany. The UV index will be displayed on the dispensers. QR codes lead to further information about the local UV index, the correct UV protection and the sunscreen used.

3. UV and Climate Change

In Germany, climate change is contributing to a change in everyone's exposure to UV radiation and thus in the risk of UV-related diseases such as cancers of eye and skin. Within the framework of the climate impact and risk analysis for Germany in 2021, a high climate risk and a correspondingly urgent need for action was attested regarding the climate impact "UV-related health damage". Adaptation strategies to the health consequences of climate change should accordingly focus on preventive measures to prevent UV-related diseases, in particular cancers of the skin and eye. The UV index was included as an indicator in the monitoring report on the German Adaptation Strategy. UV radiation is also addressed in the target process of the German Adaptation Strategy.

4. Research

“*Microscale modeling of UV exposure in urban environments*”: Within the scope of this research project, a UV module was integrated into the urban climate model PALM/PALM-4U, which allows the erythema-weighted UV irradiance to be modeled with high spatial and temporal resolution. With accurate geodesy input data, the modeling leads to a sufficiently accurate picture of the real conditions as proved by comparison of modelled with measured data. Results will be published at the Digital Online Repository and Information System (DORIS; https://doris.bfs.de/jspui/)
“Feasibility study for the area-wide indication of the current UV exposure in Germany, including the current measured values of the solar UV measuring network”: In this study, the feasibility of a combination of measured and based on satellite data modelled UV irradiance was investigated for the area-wide indication of the current UV exposure. Results will be published at the Digital Online Repository and Information System (DORIS; https://doris.bfs.de/jspui/).
“*Measurement and evaluation of devices relevant to the general population with UV radiation sources for disinfecting indoor air and surfaces": Assessment of risks to the eye and skin*”: In this study, devices with UV-C radiation sources were examined and assessed with regard to the risk to eyes and skin posed by the devices. Results will be published at the Digital Online Repository and Information System (DORIS; https://doris.bfs.de/jspui/).