HELLENIC REPUBLIC
Report on sunbeds activities
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General research activities related to sunbeds' UV emissions

Hardly any data were available regarding the sunbeds' ultraviolet radiation emissions and the quality of the artificial tanning services provided at relevant commercial premises in Greece. Greek Atomic Energy Commission (EEAE), the national competent regulatory authority for radiation protection, recognizing the lack of data and the severity of the matter initiated a surveillance action of the artificial tanning sector in Greece. This was the first action ever performed in Greece and aimed to evaluate the sunbeds' emissions, the operator's adequacy and the provision of services, to synchronize the artificial tanning sector with the requirements of the European technical standards (EN 60335-2-27:2013, EN 16489-1:2014, EN 16489-2:2014 and EN 16489-3:2014) and to inform the public about the artificial tanning hazards and the approved practices.

In situ ultraviolet radiation measurements from 52 sunbeds in solaria businesses all over Greece were performed during October 2013-February 2015. During the inspections, operators were interviewed and asked to fill a questionnaire regarding the provision of services. Results revealed that the ultraviolet radiation in almost two out of three sunbeds measured (65% of the 52 sunbeds measured) exceeded the erythemal irradiance limit. Analysis of the questionnaires revealed insufficient operators' skills and inadequate provision of services.

Legislation

Following the results of this first surveillance action conducted in Greece, EEAE prepared a national legislation framework for the control and regulation of the artificial tanning sector in Greece, since no relevant national legislation existed. In this proposed legislation, the sunbeds' ultraviolet radiation limits (UV erythemal irradiance: 0.3 W/m^2, UVC irradiance: 0.003 W/m^2) and the users' exposure dose limits (e.g.: 1st session: 100 J/m^2, 2nd session: 250 J/m^2, following sessions: < user's skin type MED or < 600 J/m^2), are introduced. Also the restrictions (e.g. sunbeds' use is prohibited for persons less than 18 years old, the use of UV type 4 sunbeds is prohibited for artificial tanning, users with skin type I should be discouraged from artificial tanning) to artificial tanning are defined and the artificial tanning business' obligations are described. Moreover, the education, training and qualifications of the sunbeds' operators are determined and the inspections and measurements procedures are also set. Finally, penalties are introduced when non-compliance with the legislation's requirements is verified.

Activities for informing and educating the sunbeds operators

In order to mitigate the inspections' alarming results and to be harmonized with the technical standards' requirements, a code of practice and an online training course for sunbeds operators, along with the relevant textbook, were developed.

The sunbeds operators' code of practice describes in details the responsibilities of the artificial tanning business owner, of the sunbed's operator and of the sunbed's user. The artificial tanning business owners are required to register to EEAE and notify the EEAE for any change or modification they perform in the sunbeds. They must employ properly trained staff and ensure that all the legal requirements are fulfilled (e.g. warming posters with information about artificial tanning hazards at visible spots within the premise). The staff has to be trained and certified in order to provide artificial tanning services. The staff has to evaluate the user's ability to tan and discourage or prohibit him from sunbed use in case he finds that the user cannot be exposed to the sunbed radiation. Also the staff has to impartially inform the users about artificial tanning, design the exposure schedule according to the user's skin type and guide the users into the approved artificial tanning procedures. The sunbed users have to fill and sign a consent form to exposure to the sunbeds' ultraviolet radiation and to follow the trained stuff instructions.

The training course is an e-learning training course that covers the topics of ultraviolet radiation and its health effects, the structure and function of the skin and the eyes, the sunbeds' and sunlamps' technology, the tanning process and the approved artificial tanning practices. At the end, there is a mandatory knowledge test that every sunbed operator has to pass in order to be certified to provide artificial tanning services. This certification is valid for five years and after this period, each operator needs recertification.

The information to the artificial tanning premises' owners and the sunbeds' operators are available in details in the EEAE website, following their registration to EEAE e-services for the professional groups.

Public information activities

Informative material was developed in order to raise awareness of artificial tanning hazards and to guide the users through the approved artificial tanning procedures. The informative material is available on the EEAE website: https://eeae.gr/en/radiation-protection/uv-radiation-solarium. The public through this webpage has access to information regarding ultraviolet radiation, sunbeds and artificial tanning and their effects to the human health, the requirements for the provision of artificial tanning services at the relevant premises, the approved artificial tanning procedures and guidelines for sunbeds users.

Moreover, three informative brochures with different approaches to sunbeds and artificial tanning were developed and published:

- A leaflet for the general public entitled: "Artificial tanning "radiates" hazards" (https://eeae.gr/attachments/article/5330/EEAE_UV_leaflet.pdf), where the myths and facts about artificial tanning and the approved artificial tanning procedures are briefly described.
- A poster for the sunbeds' users entitled: "Sunbeds: What you should be aware of" (https://eeae.gr/attachments/article/5331/EEAE_UV_poster.pdf), where the approved guidelines for exposure to the sunbeds' radiation are summarized.
- A booklet for the general public entitled: "All you want to know about ultraviolet radiation and artificial tanning" (https://eeae.gr/attachments/article/5330/EEAE_UV_entipo.pdf), where the issues associated with ultraviolet radiation and artificial tanning are analyzed.

Publications from greek researchers

Petri A, Karabetsos E. Effective ultraviolet irradiance measurements from artificial tanning devices in Greece. Radiat Prot Dosimetry 2015;167(4):490-501. doi: 10.1093/rpd/ncu346.