European Code Against Cancer, 5th Edition

14 ways you can help prevent cancer

Policy Brief

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Recommendation 8 for Policymakers on Sun and ultraviolet (UV) radiation exposure

- **Harmonize and enforce policies and recommendations on protection from exposure to UV radiation across the EU.**
- **Continue to support measures to reduce exposure to UV radiation in the public and especially in children, including from sunbeds and excess solar UV radiation.**
- **Provide collective protection from sun exposure, such as shading infrastructures and greening, at the local level.**
- **In the workplace, provide organizational measures, shading, and access to UV-safe clothing or other collective and individual protective equipment to reduce exposure of workers to solar and artificial UV radiation.**
- **Complementing the above-mentioned policy measures, invest in and promote regular public health campaigns to raise awareness and knowledge of exposure to UV radiation and cancer risk, and monitor their effectiveness in changing behaviour and reducing exposure.**

Executive summary

Radiation from the sun contains invisible ultraviolet (UV) radiation. UV radiation causes damage to the skin that, in the long term, can lead to skin cancers. UV radiation from the sun and artificial sources such as sunbed is classified as known carcinogen in humans.

Skin cancer is very common and mostly due to UV radiation Therefore, a large proportion of these cancers can be prevented by reducing unnecessary, excessive UV exposure.

Primary prevention can substantially reduce the occurrence of skin cancer and thus reduce associated economic burden. Policymakers should regulate and discourage the use of commercial tanning facilities, through strict legislation or preferably a ban. They should ensure population-wide communication and education about the UV index, e.g. with weather reports, and support creating outdoor shade facilities in schools and recreational areas, focusing on the protecting of children and of heavily exposed outdoor workers.

This policy brief describes international policies and guidelines that support policymakers and other stakeholders to implement the European Code Against Cancer, 5th Edition (ECAC5) policy recommendation to address cancer burden caused by solar and artificial UV exposure.

Key Policy Actions to reduce sun and UV radiation exposure

- **Harmonise and enforce policies and recommendations on protection from UV radiation exposure across the EU.** An extensive list of international and national recommendations and guidelines as well as educational materials already exist on how to behave safe in the sun and to avoid sunbed use to reduce the risk of skin cancer. A harmonized European initiative, which ensures that public advice is given in the same way, is necessary for transporting (agreed) basic information, regulation, and legislation.
- **Continue to support measures to reduce exposure to UV radiation in the public and especially in children, including from sunbeds and solar UV radiation exposure.**
  - Children are very sensitive to UV and are also further exposed to UV radiation throughout their life course. It is important that children are educated and guided, in kindergartens and schools, on how to manage exposure to solar UV radiation (UVI index, textile and shade protection and proper use of sunscreens) and the perils of artificial sunbeds. Sunbed use should be forbidden for those under the age of 16-18 years (depending on individual country legislation).
  - Regulating sunbeds as consumer products (such as in the framework of the EU low voltage directive -(2014/35/EU) does not address the substantial public health impact of these devices. As there are no indications for threshold levels of UV-irradiance and -dose, it is not possible to set a safe limit for UV-irradiance from sunbeds.

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International Agency for Research on Cancer

World Health Organization

- **Provide collective protection from sun exposure, such as shading infrastructures and greening, at the local level.**
- **In the workplace, provide organisational measures, shading and access to UV-safe clothing or other collective and individual protective equipment to reduce exposure of workers to solar and artificial UV radiation.** As a standard, employers should provide prevention measures for outdoor workers, including provision of shade, protective clothing and sunscreen to minimize UV exposure.
- **Invest in and promote public health campaigns to raise awareness and knowledge of UV radiation exposure and cancer risk, and monitor their effectiveness in changing behaviour and reducing exposure.**
  - Little has changed in UV exposure behaviours despite better public awareness of its dangers. More research is needed to find effective ways to promote UV protection, especially for frequent sunbathers, outdoor workers, and vulnerable groups like children.
  - Information material and the development of educational curricula should account for multilingual and culturally sensitive information.

Risk of cancer

- Radiation from the sun contains invisible UV radiation. UV radiation causes damage to the skin that, in the long term, can lead to skin cancers such as squamous cell carcinoma and basal cell carcinoma.
- Squamous cell carcinoma is common in occupationally UV radiation-exposed populations such as farmers, street workers, or seamen.
- In 2022, 3.4% of all cancers were caused by melanoma cancers in the EU. In the same year this resulted in 16,743 deaths due to melanoma of the skin.
- There is strong evidence that sunbed exposure causes skin melanoma, squamous cell carcinoma and, to a lesser extent, basal cell carcinoma, at all ages and especially when the first exposure takes place in younger ages. The use of sunbeds increases the risk of skin cancer, especially if such use starts before the age of 35 (around 59% increase in melanoma risk).

Monitoring progress

Governments are encouraged to monitor sunbed use and skin cancer incidence, preferably through comprehensive cancer registries. Research investment to gauge the effectiveness of interventions, to identify emerging risks and to refine strategies should be intensified and progress monitored.

Image by taniadimas. Courtesy of Pixabay

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