



# Policies to reduce the excessive exposure of children to ultraviolet radiation

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## Action to reduce the excessive exposure of children to ultraviolet radiation

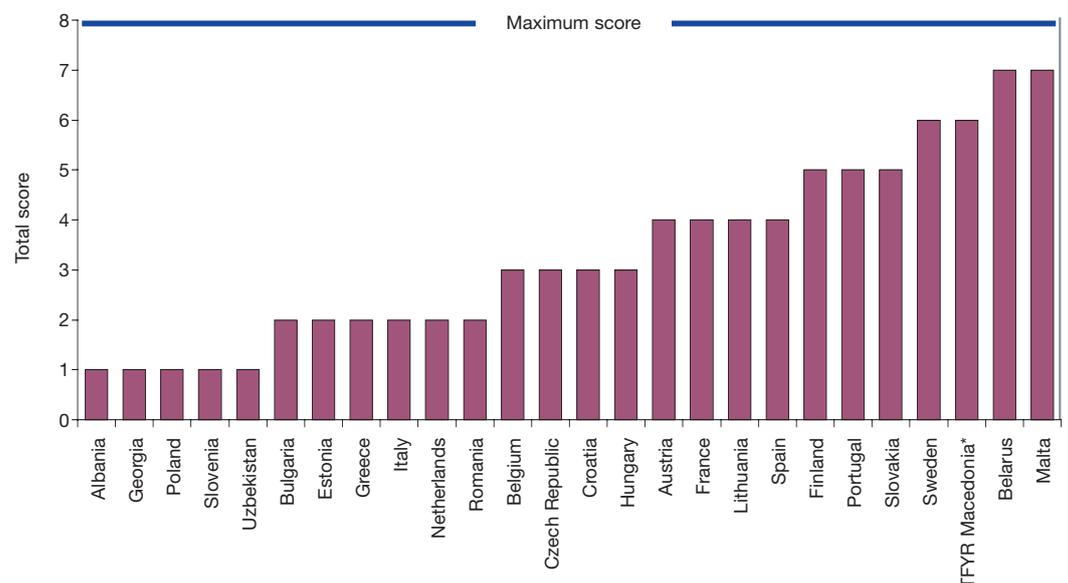
### KEY MESSAGE

☹ The 26 selected countries vary widely in the action they have taken to reduce the excessive exposure of children to ultraviolet radiation (UVR). Preventive action ranges from media campaigns encouraging people to protect themselves against UVR and provision of public information about the harmful level and effects of exposure to UVR, to legislation on the use of sunbeds by children and teenagers. There are major opportunities for the development of policies as well as for the harmonization and strengthening of national efforts to reduce the excessive exposure of children to solar UVR.

### RATIONALE

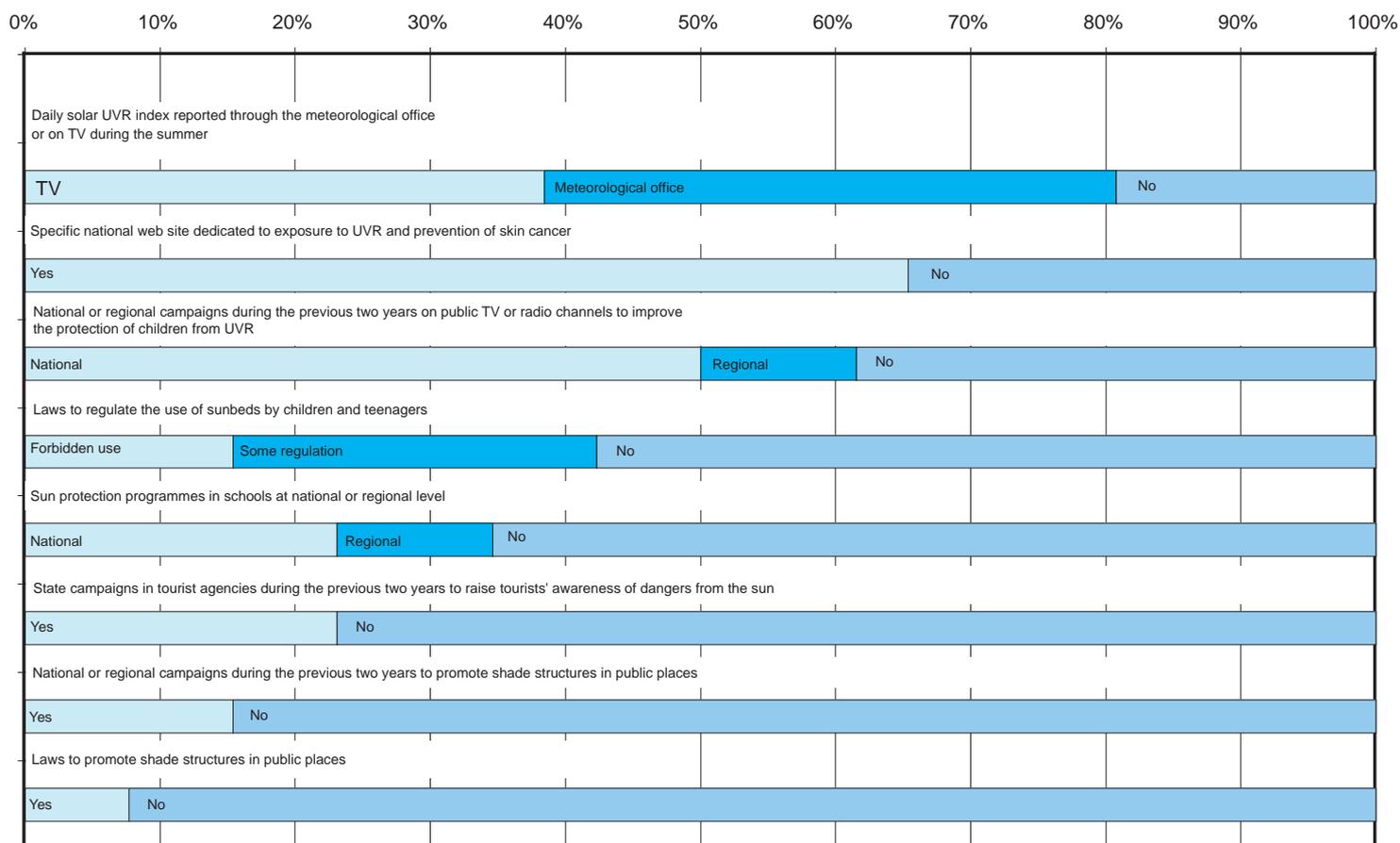
Children are increasingly being exposed to UVR, mainly on sunny holidays and during the popular and frequent activity of tanning. Children absorb the UVR required for the development of their bones and soft tissue through normal outdoor activities in most countries. Excessive exposure can damage their vulnerable body tissues and lead to chronic diseases, particularly skin cancer, in later life. This indicator provides a snapshot of countries' efforts to reduce the excessive exposure of children to UVR. It is defined as a score indicating the extent to which different activities and policies, as recommended by the WHO INTERSUN programme (1), are present.

Fig. 1. Degree of implementation of action to reduce exposure of the population to UVR in 26 countries in the WHO European Region, 2006



Note. TFYR Macedonia = The former Yugoslav Republic of Macedonia  
Source: ENHIS-2 project countries and countries volunteering data.

Fig. 2. Action to reduce the excessive exposure of children to UVR in 26 countries in the WHO European Region, 2006



Source:  
ENHIS-2 project countries and countries volunteering data.

## PRESENTATION OF DATA

Figure 1 shows clearly that the WHO INTERSUN recommendations have not been fully implemented. There are wide variations in action taken by the countries: generally it is at a low or moderate level, and there is no clear north–south or east–west gradient. The differences between countries visible in Fig. 1 may be due to various causes, including under-reporting and true non-existence of policy actions.

Figure 2 displays country activities under six headings aimed directly at reducing exposure to UVR by means of campaigns and information programmes and two headings concerning legislation. Most countries have web sites dedicated to protection against UVR; 50% report that they have national, and 12% regional, television (TV) or radio campaigns aimed at improving the protection of children against excessive exposure to UVR. Other activities are, however, being less well carried out.

## HEALTH – ENVIRONMENT CONTEXT

Epidemiological and experimental studies have provided clear evidence that solar UV activity, broad UVR and use of sunbeds can lead to skin cancer. Exposure to UVR seems to be on the increase, with more people sunbathing regularly and using sunbeds. As a result, the incidence of melanoma is increasing in European countries (see ENHIS fact sheet 4.2 on the incidence of melanoma) (2). In northern Europe, there appears to be a decline in this trend in people aged under 70 years. The incidence of other skin cancers is more difficult to assess because registrations are less reliable. A rising trend among adolescents has, however, been reported (3). Exposure to UVR during childhood and adolescence appears to be a causal factor in the development of both melanoma and non-melanoma skin cancers later in life. Both excessive exposure (burns) during early years and overall life-time exposure are important risk factors. A significant part of a person's

lifetime exposure to UVR occurs below the age of 18 years, due to outdoor activities and the longer time children have to develop diseases with long latency. Some simple measures can reduce the exposure of children to UVR, such as wearing sunglasses, hat and t-shirt out of doors and avoiding sunbathing at noon (plus two hours before and after) when solar UVR is at its most intense (4).

## POLICY RELEVANCE AND CONTEXT

In 2004, the Fourth Ministerial Conference on Environment and Health adopted the Children's Health and Environment Action Plan for Europe (CEHAPE), which includes four regional priority goals to reduce the burden of environment-related diseases in children. This indicator monitors one of the goals (RPG IV): "Implementing policies that raise awareness and endeavour to ensure reduction of exposure to UVR, particularly in children and ado-

lescents”, by measuring the extent to which policies exist to prevent or reduce excessive exposure to UVR by children (5). In addition, the indicator monitors some of the main recommendations of the WHO INTERSUN programme, as well as the level of official control of sunbed use by teenagers. However, except for policies to regulate sunbeds, there are few official national policies directed at reducing exposure to UVR by children (1).

It is vital to increase public awareness and knowledge of the potential negative health effects of excessive exposure to UVR. This information should be readily available through channels such as TV, the radio, campaigns, meteorological websites and in schools. The tourism industry can also play a crucial role in minimizing the risks associated with exposure to the sun by disseminating information to clients and by carrying out a small number of essential measures in tourist facilities and services. A UVR index can help to identify appropriate action to be taken according to the levels of UVR measured. Furthermore, the use of sunbeds by children and adolescents should be strongly discouraged, if not forbidden. This has also been emphasized by the Scientific Committee on Consumer Products in its Opinion on biological effects of ultraviolet radiation relevant to health with particular reference to sunbeds for cosmetic purposes (6). INTERSUN programme recommendations can serve as a framework for a European action plan to reduce exposure to UVR (1). The United States Environmental Protection Agency’s SunWise program, among others, provides appropriate contents for a children’s educational programme (7).

## ASSESSMENT

Excessive exposure to UVR during childhood or adolescence is one of the main reasons for the development of skin cancer, and yet most countries do not have comprehensive policies to reduce the excessive exposure of children to solar UVR. Artificial exposure to UVR is targeted by regulations restricting the use of sunbeds by children and teenagers. Even though it is estimated that 25% of users of sunbeds in northern Europe are aged 16–24 years, most countries do not regulate their use by adolescents. Only Belgium, France, Portugal and Spain currently prohibit the use of sunbeds by adolescents, and seven other countries report other methods of control.

In addition, many countries have national and regional campaigns focusing on protection from exposure to solar UVR, including campaigns to (i) improve the protection of children against UVR on public TV or radio (17 of the 26 countries surveyed), (ii) promote shade structures in public places (4 countries) and

(iii) raise awareness of sun dangers among tourists in tourist agencies (6 countries).

The provision of information about the harmful level and effects of exposure to UVR is well organized. Most countries (21) reported providing a daily solar UV index through the online meteorological office or through TV during summer. Seventeen countries have national web sites dedicated to exposure to UVR and prevention of skin cancer. Sun protection education programmes for children, as proposed in the INTERSUN programme, were reported to be in place at national level in Belarus, Malta, Portugal, Sweden and The former Yugoslav Republic of Macedonia, and at regional level in Austria, Belgium and Slovakia. Some studies have shown that children and adolescents are significantly exposed to UVR during school hours, even in Nordic countries such as Finland and Sweden on summer days. In Belarus, Slovenia and Uzbekistan, laws to promote shade structures in public places are part of construction and technical building standards.

Major opportunities exist for the development of policies as well as for the harmonization and strengthening of efforts to reduce the excessive exposure of children to UVR. National policies to reduce artificial UV exposure – including regulations for the use of sunbeds by children and teenagers – should be implemented in more countries in the Region. Excessive exposure to solar UVR can best be prevented through regional and local awareness-raising and information campaigns, in particular in educational institutions, which stimulate schoolchildren to take measures to protect themselves against the sun.

## DATA UNDERLYING THE INDICATOR

### Data source

Data for 2006 have been provided by health and cancer institutes in Albania, Austria, Belarus, Belgium, Bulgaria, Croatia, the Czech Republic, Estonia, Finland, France, Georgia, Greece, Hungary, Italy, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, The former Yugoslav Republic of Macedonia and Uzbekistan. The responsible person in each institute answered a questionnaire developed within the ENHIS project (8).

### Description of data

The indicator is a composite index of national efforts to improve the protection of children from exposure to UVR. These are divided into eight action items. For some items additional information was gathered (e.g. national or regional coverage).

- Daily solar UVR index reported through the meteorological office or on TV during the summer

Score: Yes: 1 (additional information: TV, through Meteorological office); No: 0.

- Specific national web site dedicated to exposure to UVR and prevention of skin cancer  
Score: Yes: 1; No: 0.
- National or regional campaigns during the previous two years on public TV or radio channels to improve the protection of children from UVR  
Score: Yes: 1 (additional information: national level; regional level); No: 0.
- Laws to regulate the use of sunbeds by children and teenagers  
Score: Yes: 1 (additional information: complete ban or other regulations); No: 0.
- Sun protection programmes in schools at national or regional level  
Score: Yes: 1 (additional information: systematic at national level, systematic at regional level); No: 0.
- State campaigns in tourist agencies during the previous two years to raise tourists’ awareness of dangers from the sun  
Score: Yes: 1; No: 0.
- National or regional campaigns during the previous two years to promote shade structures in public places  
Score: Yes: 1; No: 0.
- Laws to promote shade structures in public places  
Score: Yes: 1; No: 0.

Descriptive data were also collected including the name of the policy, the year it was put in place and a web link for reference.

### Method of calculating the indicator

When the country responded Yes to one of the items, a score of 1 was noted. The maximum score is 8. For some items, further details have been requested (Fig. 2).

### Geographical coverage

26 countries in the Region.

### Period of coverage

Snapshot overview of the situation in 2006.

### Data quality

The indicator should be regularly adjusted as countries update or introduce new plans, policies and strategies. There is a small chance of interpretation bias in answering the questions, which could affect comparison of results.

It would be useful to follow up the degree of implementation of the different activities by redistributing the questionnaire in future years, accompanied by surveys assessing the actual reduction of excessive exposure to UVR. As there are currently few official regulations, the indicator comprises activities that are mainly based on recommendations in the WHO INTERSUN programme. Once official guidelines and laws are in place (for example, defined in a common European action programme), they should also be monitored. Countries must continue to be encouraged to involve ministry officials and qualified experts to respond to future questionnaires.

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### Further information

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### Further information about recommendations on the exposure of children to UVR

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### Authors:

Jean-François Doré, Institut national de la santé et de la recherche médicale (INSERM), Paris, France;

Eva Kunseler, National Public Health Institute, Kuopio, Finland;

Philippe Pirard, National Institute of Public Health Surveillance, Saint-Maurice, France;

Hajo Zeeb, MBEI University Mainz, Germany.