

# INTERSUN

## The Global UV Project A Guide and Compendium

To reduce the burden of disease  
resulting from exposure to UV radiation  
while enjoying the sun safely



Radiation and Environmental Health Unit  
Protection of the Human Environment  
World Health Organization  
Geneva



WORLD HEALTH ORGANIZATION  
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# Preface: Why Worry about UV Radiation Exposure

Overexposure to ultraviolet (UV) radiation from the sun and artificial UV radiation sources is of considerable public health concern. It plays a major role in the development of skin cancer and eye damage. There is increasing evidence that it suppresses the immune system, which could lead to a reduction in the efficacy of immunization programmes and increase the spread of infectious diseases.

Between two and three million non-melanoma skin cancers are diagnosed worldwide each year, but they are rarely fatal and can be surgically removed. Approximately 130,000 malignant melanomas occur globally each year, substantially contributing to mortality rates in fair-skinned populations. An estimated 66,000 deaths occur annually from melanoma and other skin cancers.

Worldwide some 12 to 15 million people become blind from cataracts annually, of which up to 20% may be caused or enhanced by sun exposure, according to estimates by the World Health Organization (WHO). These numbers will increase as the stratospheric ozone layer is depleted over the next decades, unless people become aware of the hazards of UV radiation exposure, especially from the sun.

The good news is that UV radiation education and prevention programmes are very cost-effective. A study completed by a WHO collaborating centre in Australia has shown that the average cost per head of population for the education campaigns is US\$ 0.08, while the average cost per head of population for treating skin cancer is US\$ 5.70. Thus the value of prevention campaigns is hugely cost-effective.

Promoting UV radiation protection in a positive way is essential to have the best impact. Use the theme "enjoy the sun safely".

# Introduction: INTERSUN – WHO's Global UV Project

In 1992, the United Nations Conference on Environment and Development agreed under Agenda 21 "to undertake as a matter of urgency, research on the effects on human health of increasing ultraviolet radiation reaching the earth's surface as a consequence of depletion of the stratospheric ozone layer; and on the basis of the outcome of this research, to consider taking appropriate remedial measures to mitigate the above mentioned effects on human beings".

In response to Agenda 21, WHO, in collaboration with the United Nations Environment Programme, the World Meteorological Organization, the International Agency on Cancer Research and the International Commission on Non-Ionizing Radiation Protection, established INTERSUN, the Global UV Project.

## INTERSUN'S MISSION STATEMENT

**"To reduce the global burden of disease resulting from exposure to UV radiation"**



INTERSUN provides sound scientific information and practical advice on the health impact and environmental effects of UV radiation exposure. The project encourages countries to take action to reduce UV radiation-induced health risks and provides guidance to national authorities and other agencies about effective sun awareness programmes.

Since 1995 INTERSUN has provided a wealth of information about research and public health measures concerning UV radiation and its health effects.

# Scope and Purpose

This document, prepared by Sabine Petry, is intended for national and local authorities and non-governmental organizations (NGOs) active in the area of UV radiation and sun protection. It highlights INTERSUN's priority activities and publications, which can be obtained from our homepage (<http://www.who.int/uv>) or by request ([uvinfo@who.int](mailto:uvinfo@who.int)).

The purpose of this document is to provide information from INTERSUN that can be used to develop and implement integrated public health programmes which reduce health risks from excessive UV radiation exposure. An important objective is to facilitate the harmonization of national activities and coordination of international activities through the use of the Global Solar UV Index and its associated health protection messages.

