

Foreword to papers on stratospheric ozone and UV radiation

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This edition of the Australian Meteorological Magazine includes several of the papers that were originally presented at a conference on the health consequences of ozone depletion held in Hobart in September 1996. I congratulate the editors on this initiative and thank them for the invitation to prepare this foreword which describes the role of the Menzies Foundation in this field.

The Menzies Foundation

The Sir Robert Menzies Memorial Foundation was formed in 1979 as a non-political bipartisan organisation with two main objectives. The first was to promote, through research and innovation, the health and fitness of the Australian community: the second was to promote activities of intellectual distinction both locally and overseas which reflect favourably on Australia's reputation.

In its scientific work, the Foundation has given strong emphasis to three principles. First, it has sought high standards of excellence both in the planning and in the participation of each activity; second, long and lasting public benefit from the activities that it has supported; and third, it has chosen not to operate in fields that are primarily the province of Government. More than that, it has preferred to confine its activities to those fields where, for various reasons, Governments and other organisations have had difficulty in working on their own. In each case, the Foundation's strategy has been to bring together the various government, voluntary, private sector, academic and other agencies at senior level in some form of activity that has acted as a catalyst to promote needed action.

During its first ten years, the Foundation sponsored a series of workshops and seminars resulting in the publication of fourteen Volumes of its Transactions and three Technical Reports. Commenting on this activity at the opening of the Foundation's second national conference in 1985, Sir Ninian Stephen, then Governor-General of Australia, wrote:

There is one feature of the Foundation not entirely obvious at first glance but which, for that very reason, deserves special mention: it is the quite radical modernity which the objects of the Foundation represent. ... It is only in the lifetime of many of us here today that the physical fitness of a whole people has become both a subject of serious study, a respectable concern, and a matter of increasing moment.

The goal of a better life for a whole population, to be sought through a better understanding of the physiology of Man and to be gained by the rigorous application of scientific method, represents a very modern goal to be attained by very modern means.

The ozone conferences

As part of its health orientation, the Foundation in May 1989 sponsored an initial conference on 'The Ozone Layer and Health' in Hobart. The conference papers discussed stratospheric ozone depletion, increased exposure to ultraviolet radiation due to that depletion and possible human health consequences. The objective was to produce a definitive set of scientific papers outlining the present position and some possible future scientific needs.

The major finding was that the ozone loss over the Antarctic was higher than predicted and that there had been a corresponding increase in exposure to ultraviolet radiation which was damaging to all forms of life. The recommendations related primarily to human health, and included such items as the creation of a network of land-based ultraviolet monitoring stations and standard-

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isation of data by State cancer registries. Several of these recommendations were later implemented. The conference proceedings were published as Volume 15 of the *Transactions of the Menzies Foundation* (Menzies Foundation 1989).

Between 1989 and 1996, a considerable body of research on the effects of ultraviolet radiation was published, and evidence seemed to confirm that depletion of the ozone layer was continuing. The Foundation therefore sponsored a second conference in Hobart from 9 to 11 September 1996. The findings were instructive.

Conclusions of the second conference

The conference found that there had been in recent years a steady increase in the incidence of skin cancer which is now a major public health problem. Participants concurred in the view that:

Whilst it was concluded that ozone depletion would add to the burden of skin cancer occurrence, a most important additional consequence of this environmental mishap has been to highlight the already grave and increasing health problem posed by skin cancer. In Australia, the incidence of skin cancer is a major public health problem which has been apparent for several decades and will remain even after the ozone 'hole' has been repaired.

A reduction in the incidence of skin cancer would be an important target for improving public health. However, attainment of that result would be difficult and complex and participants were reluctant to offer detailed recommendations. Instead the Foundation was asked to

act as a catalyst by inviting a small group of appropriate scientists to develop the framework for an extended Australian research project covering several centres and spread over several years.

At its meeting on December 16, the Menzies Foundation Board supported the conclusions and accepted the recommendation. A proposal for a new and major research project addressing the public health problem of skin cancer is currently being developed.

The conference conclusions were:

- (a) The existing program of systematic observation and analysis of stratospheric ozone and surface UV radiation needs to be enhanced to support national requirements of the public health programs associated with the impacts of UV radiation.
- (b) There should be an *ad hoc* expert working group of appropriate scientists to specify the measurements which should be made on a regular basis and the research needed to improve measurement accuracy, validity and relevance.
- (c) The Menzies Foundation is asked to give effect to these conclusions.

By agreement with the Australian Cancer Society, the full set of conference papers has been published (Australian Cancer Society 1996) and may also be downloaded from the Internet through the Menzies Foundation's Home Page at <http://www.vicnet.net.au/~menzies>.

References

- Australian Cancer Society. 1996. The Health Consequences of Ozone Depletion. *Special Edition of Cancer Forum*, 20, 3, Sydney.
- Menzies Foundation. 1989. The Ozone Layer and Health. *Trans. Menzies Foundation*, 15, Melbourne.