

In February of this year, the Minister of the Environment received a report from the Royal Society of Canada entitled "The Environmental Consequences of Nuclear War". The following is the Government's response to that report.

The Royal Society's study focuses on the possibility of a nuclear winter and its consequences for Canada. The conclusions of the study are in basic agreement with the findings of other scientific organizations such as the Swedish Academy of Science and the U.S. National Academy of Science. The principal conclusion is that a major drop in global temperature could follow a nuclear exchange. This phenomenon, popularly called nuclear winter, is the result of smoke and dust particles reducing the incoming energy from the sun.

The Royal Society puts forward many recommendations for further research to reduce the current scientific uncertainties surrounding the nuclear winter hypothesis. These uncertainties concern, for example, the amount of smoke that could be generated by burning cities and forests; how that smoke would be distributed in the atmosphere; the magnitude of the drop in surface temperatures; and most importantly, how these factors will affect agriculture, livestock and fish, other species and, of course, the survival of man.

There is general agreement within the Government that the nuclear winter hypothesis is scientifically credible even though the details regarding its magnitude and duration are subject to great uncertainties. Some of the scientific uncertainties may be reduced by continuing research within existing programmes.