

We have recently surveyed 100 major American scientific associations concerning their policies on nuclear weapons. Of the 48 respondents 11 have charters that preclude their making editorial statements on such issues. Of the remaining 37 responding organizations, eight have adopted statements urging both the United States and the U.S.S.R. to halt, or substantially limit, the testing,

production, and deployment of nuclear weapons. These eight organizations are the American Institute of Aeronautics and Astronautics, the American Physical Society, the American Physiological Society, the American Psychological Association, the American Society for Cell Biology, the Association of American Geographers, the Federation of American Societies for Experimental Biology, and the Natural Resources Defense Council. These organizations represent nearly a quarter of a million American scientists. Similar editorial statements are being considered by the Ecological Society of America and other scientific associations. We did not survey engineering and medical associations or scientific associations with fewer than 1000 members, several of which have adopted similar statements. It is becoming clear that a large proportion of America's scientists disagree with this nation's nuclear weapons policy. We therefore urge the current Administration to seriously consider the recommendations of these scientific groups with respect to nuclear armaments policy.

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Support/Freeze ↑

T. 12/12/84  
FEARS OF A  
NUCLEAR WINTER

Washington (Reuter) - An East-West nuclear war could cause a severe drop in temperature over much of North America, Europe and the Soviet Union, a panel of US scientists said in a Pentagon study issued yesterday.

Similar reports from other scientific groups have also predicted a "nuclear winter" effect from smoke and dust choking the atmosphere, blocking the sun's rays and perhaps devastating crop production.

Yesterday's report by the National Research Council said a widespread exchange of some 25,000 nuclear warheads could send average temperatures plunging by up to 45°F (25°C) for possibly six to 20 weeks.

But it cautioned that current data is not reliable enough for "scientific predictions" and called for further studies.

The council is a branch of the private National Academy of Sciences. Its report was requested by the US Defence Department.

Nineteen scientists and scholars participated in the study. The committee said it found "a clear possibility that great portions of the land areas of the northern temperate zone (and, perhaps, a larger segment of the planet) could be severely affected".

It added: "Possible impacts include major temperature reductions (particularly for an exchange that occurs in the summer) lasting for weeks, with subnormal temperatures persisting for months."

G. 13/12/84  
**Pentagon  
confirms  
nuclear  
winter  
threat**

From Harold Jackson  
in Washington

A report commissioned by the Pentagon has supported the scientific theory that a nuclear war could be followed by a catastrophic fall in temperatures in the northern hemisphere — the so-called nuclear winter.

The American National Academy of Sciences was asked by the Defence Department to study the theory when it was first promulgated by individual scientists in 1983. Only a general indication of the seriousness of what might occur.

Eighteen specialists — drawn from universities, government nuclear weapons centres, and private industry — were appointed by the National Research Council to carry out the project.

Their report, just published here, says that a nuclear exchange in which the super powers used only half their stockpile of weapons could pollute the atmosphere with dust and smoke for six to 20 weeks. If the war was waged in spring or summer, the resulting loss of sunlight could reduce temperatures in North America and Eurasia by between 18 and 55 degrees.

Working on the assumption that the attacks would be against each side's principal military targets and against the 1,000 largest cities in the Nato and Warsaw Pact countries, the team says that the impact of the war would not be so severe on the southern hemisphere.

But "significant amounts of dust and smoke could drift to and across the Equator as early as a few weeks after a nuclear exchange," it adds.

The blast from the explosions, the committee calculated, could propel between 10 million and 24 million tons of dust into the stratosphere and the resulting fires could produce from 20 million to 650 million tons of smoke. Temperatures could start to drop immediately.

The freeze might last for months in the northern temperate zone, with an almost total loss of light.

**? SUNDAY TIMES MORI  
Opinion Poll**

on standard of living were almost the same.

Today, thought, there is more optimism about world peace. The poll finds 58% of people believing world war is unlikely during the next 25 years, compared with only 40% who believed that last year.

At the end of 1983 cruise missiles had just arrived in Britain and the new cold war was at its height. Now the more relaxed atmosphere between the United States and the Soviet Union appears to have changed British public opinion. (The poll was carried out before Mrs Thatcher's recent round-the-world journey to the US and China.)