

EDITORIAL

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## Health Effects of the Gulf War<sup>†</sup>

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As a doctor in the Gulf region and president of the Bahrain Cancer Society, I am concerned about the effects of the Gulf war on health. Dr T J Jones mentioned the environmental problems caused by the war,<sup>1</sup> and these may have short term and long term effects on health.

The disruption of the ozone layer by the smoke of hundreds of burning oil wells and by the high flying, supersonic military aircraft (which have made over 100 000 sorties) will increase the amount of ultraviolet radiation penetrating to the earth, which in turn may increase the incidence of skin cancer and cataracts.

The smoke from the burning oil wells will also lead to an increase in the ozone in the lower atmosphere, which may result in irritation of the upper respiratory tract, allergies, and asthma. If it continues to be produced for a long period, the smoke will eventually lead to an increase in the incidence of lung cancer.

Oil spills and consequent contamination of sea-food may lead to poisoning with lead, sulphur, and other trace elements as well as with some carcinogenic materials. If contaminated sea-food is consumed in the first trimester congenital abnormalities may occur.

Contamination of the water supply with oil may result in poisoning by the accumulation of trace elements, and consumption of the polluted water in the first trimester may lead to congenital abnormalities. Consumption of polluted water may also lead to leukaemia, especially in children.

The vegetation in this region is fragile, and an increasing amount of ultraviolet radiation may have a harmful effect. In addition, vegetation may be affected by the acid rain and become polluted by carcinogens in the smoke; if consumed this may have harmful effects on humans or animals. Black rain has already been reported in Iran and Turkey.

It would be extremely helpful if professional organisations in the region and in the West in cooperation with the World Health Organisation formed a team or study group to evaluate the short term and long term effects of the Gulf war on humans in the region.

### REFERENCE

1. Jones TJ. War and medicine. *BMJ* 1991;302:1024.

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<sup>†</sup> Published in the British Medical Journal, *BMJ* Volume 302, 11th May 1991