

WORLD HEALTH ORGANIZATION

FIFTY-FOURTH WORLD HEALTH ASSEMBLY
Provisional agenda item 13.10

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Health effects of depleted uranium

Report by the Secretariat

1. At its 107th session, the Executive Board decided to include health effects of depleted uranium on the agenda of the Fifty-fourth World Health Assembly.¹

URANIUM AND DEPLETED URANIUM

2. Uranium is a naturally occurring element used, among other applications, in the generation of nuclear power. Naturally occurring uranium has three principal radioactive isotopes, namely U-238, U-235 and U-234.

3. Depleted uranium is a by-product of the process of uranium enrichment in the nuclear power industry in which nearly all the radioactive isotope U-234 and about two-thirds of the U-235 are removed. Thus, depleted uranium is almost entirely U-238 and is about 60% as radioactive as natural uranium. Depleted uranium can also contain traces of other radioactive isotopes introduced during processing.

4. Chemically, physically and toxicologically, depleted uranium behaves in the same way as the metallic form of natural uranium. Fine particles of both metals ignite easily, producing oxides.

5. Civil applications of depleted uranium have included counterweights in aeroplanes, and shields against radiation in medical radiotherapy units and transport of radioactive isotopes. Depleted uranium is used for heavy tank armour, anti-tank munitions, missiles and projectiles because of its high density and melting point, and easy availability.

ACTION BY WHO

6. WHO collaborates with international agencies dealing with the subject both within and outside the United Nations system, such as UNEP, IAEA, the North Atlantic Treaty Organization (NATO), and the European Commission. IARC is assisting with the review of scientific studies on workers and military personnel exposed to uranium and depleted uranium, and with the preparation of protocols for comprehensive epidemiological studies.

¹ Decision EB107(3).

7. Following a request from the Government of Iraq on possible environmental health consequences of the Gulf War, the WHO Regional Office for the Eastern Mediterranean sent a mission to Iraq in 1995 to assess the national cancer registry and to advise on cancer incidence rates. A second mission went to Iraq in August 1998 to advise on possibilities for investigating the reported increase in leukaemia cases in the southern governorates. At the end of January 2001, another mission visited the country to assess the situation on non-communicable diseases, including cancer, and to advise on strengthening national prevention and control initiatives. A meeting with Iraqi scientists (Geneva, April 2001) is expected to finalize a plan of cooperative action.

8. In response to a request from the United Nations Mission in Kosovo, a WHO team visited Kosovo from 22 to 31 January 2001 to advise on claims regarding the possible risks to the health of the population associated with exposure to depleted uranium and other environmental contaminants.¹ This report is consistent with the European Commission scientific expert's opinion of 6 March 2001 and with the report on sampling and analysis of depleted uranium residues collected by a UNEP technical and scientific team in Kosovo, which was issued on 13 March 2001.²

9. Fact sheet No. 257, January 2001, was issued intended for governments, the media and the public at large summarizing current knowledge on the subject, including potential risks to human health.

10. A WHO monograph is being finalized that summarizes the results of a scientific review covering sources and properties of uranium and depleted uranium, their uses, behaviour in the body following human exposure, chemical and radiological risks, recommendations for health monitoring, medical management and precautionary measures, public health standards, and research recommendations. A summary of the results are provided in the addendum to this document.

11. IAEA, UNEP and WHO, in accordance with their respective mandates, will consider together whether it is necessary to prepare future missions to areas where depleted uranium has been used during military conflicts.

ACTION BY THE HEALTH ASSEMBLY

12. The Health Assembly is invited to take note of the report.

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¹ Report to be disseminated on WHO's Web site: <http://www.who.int>.

² Depleted uranium in Kosovo: post-conflict environment assessment. UNEP Balkans, 2001: <http://www.balkans.unep.ch>.