

# Health investigations of depleted uranium clean-up workers

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## KEY WORDS

Depleted uranium; decontamination; clean-up workers

## SUMMARY

**Background:** *The soil contaminated by depleted uranium ( $^{238}\text{U}$ ) ammunition during the NATO bombing of Serbia and Montenegro was cleaned-up for four months in 2002. A team of 11 clean-up workers (expert members) were medically examined three times: before decontamination as a preliminary medical check-up, immediately after decontamination, and four years after cleaning up contaminated ground.* **Objectives:** *This short report presents investigations and health risk assessments of clean-up workers in radioactive decontamination operations and an assessment of the environmental health perspectives for citizens living in surrounding areas.* **Method:** *The method of initial health disorders was used, analyzing the most sensitive biological materials, such as blood cells or chromosome damage, DNA strand breaks, radio-toxicological examination of urine.* **Results:** *The total number of blood cells did not change, but variations of the relative number (percentage) of cells in the leukocyte formula were observed. The total number of DNA alterations was higher immediately after decontamination than before decontamination. Four years after decontamination the number of DNA alterations had decreased. However, the number of damaged cells (lymphocytes containing chromosome lesions) was higher in both medical examinations, immediately after and four years after decontamination.* **Conclusions:** *Disease or tumours due to  $^{238}\text{U}$  did not develop in the group of depleted uranium clean-up workers during the investigation period of four years. Further monitoring of haematological and chromosomal effects and the health condition of workers is necessary.*