

REVIEW: PSR REPORT ON DEPLETED URANIUM HEALTH ISSUES

The recently published Physicians for Social Responsibility report on the health issues associated with depleted uranium surprisingly failed to draw on recent literature, studies and accepted knowledge on the issue. Indeed, the number of scientific health studies on DU poisoning included seemed quite inadequate.

It is not known why the authors of the PSR report chose to focus on information retrieved from outdated depleted uranium (DU) health literature reports by the RAND Corporation but ignored more recent empirical studies like, for example, that of the Armed Forces Radiobiology Research Institute (AFRRI). Since around 1998 there has been a growing body of evidence from in vitro and in vivo studies that indicates DU oxides may be genotoxic, mutagenic, and tumorigenic. A significant amount of this work is currently being conducted at the AFRRI under the direction of Dr. Alexandra Miller. She and her colleagues demonstrated for the first time that internalized DU oxides could result in “a significant enhancement of urinary mutagenicity”, that they can transform human cells into cells capable of producing cancerous tumors in mice with suppressed immune systems. They also found that DU was capable of inducing DNA damage in the absence of significant radioactive decay. Other experiments show that alpha particle radiation is causing the cancerous mutation followed by a build up of damage from either or both the heavy metal and radiation properties of uranium aiding the spread of the cancer, or vice versa.¹

That the authors should describe the RAND Corporation and the World Health Organisation (WHO) as ‘independent’ organisations is both surprising and incomprehensible. The RAND Corporation is an American think tank first formed to offer research and analysis to the U.S. military.² The Center for Media and Democracy has said that “Two-thirds of RAND’s research involves national security issues. This is divided into Project Air Force, the Arroyo Center (serving the needs of the Army), and the National Defense Research Institute (providing research and analysis for the Office of the Secretary of Defense, the Joint Staff, and the defense agencies).”³ Asking the RAND Corporation to study the health issues of DU oxide dust is akin to asking the CIA to investigate the torture of prisoners captured in the war against terrorism.

Also the WHO can be hardly described as an independent body on ionizing radiation and health issues. In the 1959 agreement signed between the IAEA and WHO, both parties recognized that the IAEA has the primary responsibility for encouraging, assisting and coordinating research on atomic energy throughout the world, without prejudice to the right of WHO to concern itself with promoting, developing, assisting and coordinating international health work, including research in all its aspects. This clearly suggests that the promotional bureau of nuclear energy (IAEA) considers itself to be the watchdog on information distributed to the public regarding the health effects of radiation, while the WHO contributes to medical care and public health assistance.⁴

The superficial health studies by RAND and WHO help to perpetuate the myth, accepted by the PSR authors, that the health impact of DU oxide dust is comparable with naturally occurring uranium. Dr. Keith Baverstock and other scientists researching DU health impacts, have previously observed that fine particles of DU oxide have no natural analogues. Therefore

the inhalation of DU oxide dust particles cannot be compared with the natural analogues of uranium. In contrast with natural forms, DU oxide dust particles are highly concentrated, mainly insoluble or sparingly soluble and can be lodged in the lungs for many years. Besides this notion, the WHO simply ignore the potential risk routes in addition to radiotoxicity by direct irradiation, namely, chemical genotoxicity, synergy between radiation and chemical toxicities and a bystander route. The evidence for these three routes is growing.⁵

From an independent organisation of physicians, we could have expected a more thorough, critical and up to date overview on scientific DU health studies. Unfortunately, this report did not meet with this reader's expectations.

DU: Health and Public Health Issues Arising From The Use Of Depleted Uranium Munitions, October 2005, Physicians for Social Responsibility, Kimberly Bernard, Martin Butcher, Roy Farrel MD, Robert M. Gould MD, Michael McAlly MD, 24 pages

¹ for a full review of Alexandra Miller's publications see page 59 of the IEER publication "Costs and Risks of Management and Disposal of Depleted Uranium from the National Enrichment Facility Proposed to be Built in Lea County New Mexico by LES":

<http://www.ieer.org/reports/du/LESrptfeb05.pdf>

² http://en.wikipedia.org/wiki/RAND_Corporation

³ http://www.sourcewatch.org/index.php?title=RAND_Corporation

⁴ <http://www10.antenna.nl/wise/index.html?http://www10.antenna.nl/wise/521/5111.html>

⁵ <http://www.bandepleteduranium.org/modules.php?name=News&file=article&sid=180>

Contact: LAKA Foundation at laka@antenna.nl