

## Depleted Uranium and US Veterans Current rating

John Hepler

Email: JHepler (nospam) TWLakes.net (unverified!) 21 Feb 2006

After all the huff about Weapons of Mass Destruction, it is supremely ironic that the US Military use of Depleted Uranium in Iraq perfectly meets the definition of WMDs. It is indiscriminate and potentially lethal to all the civilian population. In a more poignant irony, our own soldiers are subject to radioactive contamination from our own WMD weapons. DU is used in weaponry because of its high density and pyrophoric qualities, causing it to burn spontaneously on impact. These properties make DU ideal for use in armour-piercing anti-tank weapons. Amounts of DU used in bullets, shells and bombs vary from 3 ounces to 10 pounds, although there is speculation that some missiles may contain larger quantities. DU is also used in tank armour and for radiation shielding, ballast in missiles and aircraft counterweights.

One study estimates that between 100 and 150 tons of DU munitions was used in 2003 in Iraq-- in less than one year.(1) Depleted uranium is created-- a waste product-- in the refinement of uranium for fuel or bombs. Depleted uranium--U238-- has a half-life of about 4.5 billion years, which means it is supposedly "cold" and unreactive. It means for every 10 billion atoms of U238, only two per year will decay, or break apart violently in a small radioactive explosion. When this happens inside the body, with just one atom, there is a fair chance (no one really knows how much) of damaging effects, such as cancer.

DU also contains .2% "hot" U235, which disintegrates radioactively much more quickly, and is considered far more dangerous. If 150 tons of DU were used in 2003, that means 600 lbs of it is hot U235 dust blowing around Iraq.

But there may well be more far-reaching effects than direct radiation from particles that have entered the body. A 2001 World health organization study from 2001 concludes: The health risks of exposure to DU are likely to be only partially reflected by the radiation dose per received. Further work on the chemical transforming ability of DU, the potential for an interaction between its chemical and radiological toxicities and the significance of the bystander effect in this context is required to fully estimate the public health significance of exposure to DU. (2)

As of April 29, 2004, the US military formally-- though not loudly in public-- recognized the problem, the right of soldiers to be tested and the means of testing, a 24-hour urine collection. (Fully printed below, Appendix A)

Unfortunately, this needs to be done immediately after exposures to accurately reflect contamination, or at least as the soldier leaves Iraq. Because after the ingestion of DU, the DU migrates to the bones, organs and the body tries to excrete it in the urine. After a

time, less radioactivity is excreted, but in a contaminated person, the process continues for several months, maybe more.

It is so far impossible to prove the effects of a general area, Iraq, with 320 tons of DU dust blowing around from the first Gulf (Iraq) War, and probably 500 more tons from this round of war. Obviously some sites are severely contaminated. Cancer rates, especially in children, are way up in Iraq, but statistics are very hard come by considering the chaos that pervades.

Last year, the new York Daily News paid for (at \$1100 each) the most sophisticated testing available, which concluded not only that 4 of the 9 soldiers tested were contaminated but that DU from exploded American shells was almost certainly the cause.  
(3)

In Connecticut, the state legislature passed bills that returning Vets should get screened for radioactive contamination, DU. It seems only fair if we send the poor bastards over there, that the Grateful Citizens-- that is, the US Military using Our tax dollars-- could pay to test them.

EFFECTIVE DATE: July 1, 2005

### 33 - TESTS ON ARMED FORCES MEMBERS FOR DEPLETED URANIUM EXPOSURE

Beginning October 1, 2005, the bill requires the adjutant general and the veterans' affairs commissioner to help eligible guardsmen and veterans get federal treatment services, including a best practice health screening test for exposure to depleted uranium, if they (1) are assigned a risk level I, II, or III for depleted uranium exposure by their branch of service; (2) are referred by a military physician; or (3) have reason to believe that they were exposed to depleted uranium during service. The best practice uranium test must use (1) a bioassay procedure involving methods sensitive enough to detect depleted uranium at low levels and (2) equipment capable of discriminating between different radioisotopes in naturally occurring levels of uranium and the characteristic ratio and marker for depleted uranium.

The bill prohibits the use of state funds to pay for the tests or other federal treatment services.

By October 1, 2005, the adjutant general must report to the Veterans' Affairs Committee on the scope and adequacy of training guardsmen receive on detecting whether their service has exposed them to depleted uranium. The report must include an assessment of the cost and feasibility of adding predeployment training on exposure to uranium and chemical substances and recommended precautions in a combat zone.

I'd think that most soldiers would want to know if they had been contaminated. They damn well have a right to know. If they have not been tested, they might well take a 24-hour urine and stool sample, as soon as possible.

One other important question: is whether being contaminated (by radioactive material) could possibly have any ill health effects. The US Military and Government agencies argue strenuously against this possibility. There is considerable evidence to the contrary. This is another example of science battles contaminated by shortsighted political interests.

While this article focuses on veterans, I feel we have a profound moral obligation to examine the long-term ramifications of the use of depleted uranium, not just for the sake of our soldiers, but also for the civilian populations of countries on which we make war.

J Sandy Hepler

Note: An astounding percentage of vets returning from the first Iraq War is now considered disabled: "Out of the 580,400 soldiers who served in Gulf War 1, 11,000 are now dead. By the year 2000, there were 325,000 on Permanent Medical Disability. This number of "Disabled Vets" means that a decade later, 56% of those soldiers who served have some form of permanent medical problems. The "Disabled" rate for the wars of the last century was 5%, and 10% in Viet Nam. This does not necessarily have to do solely with Depleted Uranium.

(1) Dan Fahey, 'The Use of Depleted Uranium in the 2003 Iraq War', 24.6.2003, (<http://www.antenna.nl/wise/uranium/pdf/duiq03.pdf>)

(2) <http://www.mindfully.org/Nucs/DU-Radiological-Toxicity-WHO5nov01.htm>.

(3)For testing details, see <http://www.umrc.net/default.aspx>

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## Appendix A

[http://traprockpeace.org/rokke\\_du\\_army\\_policy.html](http://traprockpeace.org/rokke_du_army_policy.html) a 2004 article]]

April 29, 2004

Commentary by Doug Rokke

Finally after 13 years of denied medical testing, denied medical care for the majority of depleted uranium casualties, numerous requests for medical care, and continued use of uranium munitions Colonel Paula K. Underwood, M.C., in the U.S. Army Office of the Surgeon General has distributed the following official U.S. Army policy dated 4/29/04 regarding testing for depleted uranium exposure.

However, I must ask if U.S. Department of Defense officials who willfully manufactured, tested, and used uranium munitions will provide this same testing for all individuals who were exposed to uranium contamination to include residents of Iraq; the Balkans; Vieques, Puerto Rico; Okinawa; Afghanistan; locations through out the United States, England, Canada, Germany, and all other locations where depleted uranium or in reality uranium weapons were manufactured, tested, or used? If a uranium radiobioassay is now required for all level 1 and 2 exposures and is available upon request for level 3 exposures to all U.S. service members as result of confirmed or possible uranium contamination exposures then this testing must be made available to all individuals in our coalition nations and to all individuals who were affected by the U.S. military's willful use, testing, or manufacturing of uranium munitions at any location. However because thousands of children, women, and men were exposed, many are sick, and all but 262 were denied testing and medical care for 13 years will these individuals be provided care and compensation base on presumption and denial of previously mandated testing.

Level 1 is defined as: "Personnel who were in, on, or near combat vehicles at the time they were struck by depleted uranium rounds (to include wounded), or who entered immediately after to attempt rescue."

Level 2 is defined as: "Personnel who routinely entered depleted uranium damaged vehicles as part of their military occupation or who fought fires involving depleted uranium munitions."

Level 3 is defined as: "Personnel involved in all other exposures incidental in nature, e.g. driving by a vehicle struck by depleted uranium". (SECDEF 3/30/03: Policy for the Operation Iraqi Freedom Depleted Uranium (DU) Medical Management)

The acknowledgement that medical care is required for level 1 and 2 exposures and optional for level 3 exposures when compared with the findings of the U.S. Army Environmental Institute report (6/95) that: "No available technology can significantly change the inherent chemical and radiological toxicity of DU. These are intrinsic properties of uranium." indicates that medical care must be provided to all casualties and individuals affected by U.S. Department of Defense manufacture, testing, and use of uranium munitions.

Dr. Doug Rokke, Ph.D.

Major (retired), USAR  
former 3rd U.S. Army Gulf War 1 DU team health physicist  
former U.S. Army Depleted Uranium Project director

official OTSG message follows:

From: Underwood, Paula K COL OTSG [mailto:Paula.Underwood (at) us.army.mil]  
Sent: Thursday, April 29, 2004 9:24 AM  
To:[long list, deleted]  
Subject: DU policy

To All:

I just wanted to send this policy out, in case it had not yet made its way through the normal channels.

Please take note of the three different levels of exposure. Essentially Levels 1 and 2 require a 24 hour urine sample for DU bioassay. If there is incidental exposure, that is a Level 3. If a SM still has concerns, even though they have only an incidental exposure to DU, they can request a 24 hour urine sample for DU bioassay.

P.K. Underwood  
COL, MC  
Preventive Medicine Staff Officer  
Proponency for Preventive Medicine  
Office of the Surgeon General  
(703)-681-3160  
DSN: 761  
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Appendix B

Zeese: What does the legislation accomplish?

Smith: The legislation will allow all returning veterans to have the right to get a best practices health screening test for exposure to depleted uranium. The test will use a bioassay procedure involving sensitive methods capable of detecting depleted uranium at low levels and the use of equipment with the capacity to discriminate between different

radioisotopes in naturally occurring levels of uranium and the characteristic ratio and marker for depleted uranium.

This test will determine if a soldier has been contaminated. It will prevent mis-diagnosis so soldiers are not given the wrong medications that usually make them sicker. It will allow the contaminated soldier to decide about parenting further offspring who have an increased chance of serious birth illnesses or defects.

The bill also prescribes a reporting mechanism from the Louisiana's Attorney General to the legislature that requires that awareness sessions and training have been done as required by Army regulations.

Zeese: What tips do you have for activists in other states interested in pursuing this in their state?

Smith: Stay focused. Depleted uranium testing is for discovery of contamination of a very hazardous material made from radioactive nuclear waste. This is something that truly supports the troops. Remind your elected representatives of that often. Read, study, and discuss with the experts and others experienced in this type of legislation. Other advocates should remember that the weapons manufacturers do not want this in the public. They make a lot of money off this death bringing material. Likewise the military does not want to give up these very effective offensive weapons regardless of how it effects our soldiers or civilians, enemy soldiers, or the environment. Although we did not encounter resistance from those two potential adversaries, weapons manufacturers or the military, others might and they should be prepared to bring in experts. Having veterans testify helps. Another veteran, Ward Reilly, from Baton Rouge was instrumental in helping get the bill through committee.

Zeese: What were some of the challenges you faced with this legislation and how did you overcome them?

Smith: The only real obstacle we encountered was educating our representative. We knew we would have to educate her and do it quickly but fortunately she agreed to a minimum one-hour meeting. We were lucky as both representatives cared deeply about our troops and taking care of them after they come home. There were no other obstacles.

Zeese: What are your next steps?



Project, interprets the new and rapid malignancies in the soldiers (from the 2003 Iraq War) as 'spectacular Š and a matter of concern.'"

When asked if the main purpose for using it was for "destroying things and killing people," Fulk was more specific: "I would say it is the perfect weapon for killing lots of people."

Mr. Principi could not be reached for comment prior to deadline. A follow-up article will strive to obtain a response from Mr. Principi or from the VA.

Notes:

1. Depleted uranium: "Dirty bombs, dirty missiles, dirty bullets. A death sentence here and abroad." by Leuren Moret.

<http://www.sfbayview.com/081804/Depleteduranium081804.shtml>

2. Veterans For Constitutional Law, Ltd, 112 Jefferson Avenue, Port Jeff. L.I. NY 11777. Arthur N. Bernklau, Executive Director. Tel: 516-474-4261, Fax 516-474-1968.

3. Preventive Psychiatry E-Newsletter. Email Gary Kohls at in Deluth gkohls (at) cpinternet.com with "Subscribe" in the "Subject:" line.

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Appendix D: Dec 2002 interview with Dr Doug Rokke, a US Army major, who led a team investigating DU in the wake of the first Gulf (Iraq) War, in which 320 tons of DU were used by the US military. Must read <http://www.disasternews.net/news/news.php?articleid=1687> ]]