



Operation Iraqi Freedom Veterans' DU Screening Program

UMRC's bioassay and diagnostic assessment program:
Please contact our patient management coordinator at
UMRCInfo@UMRC.net

Uranium Bioassay and Clinical Studies Program – UMRC

- Bioassay for veterans of US Operation Iraqi Freedom, UK Operation TELIC and AU Operation Falconer
- DU Bioassays for civilian residents and NGO staff in Iraq, Afghanistan and Balkans
- Gulf War I veterans – Operations' Desert Storm, Desert Fox, Desert Strike and Desert Shield

Uranium Medical Research Centre (UMRC) provides uranium isotope bioassays for redeployed and active-duty armed forces members, civilians, NGO staff and veterans of conflicts where uranium weapons have been deployed. Using state of the art laboratory equipment, it is possible to identify battlefield uranium contamination that occurs several years earlier.

- **Operation Iraqi Freedom findings by UMRC**

“Quantitative Analysis of the Concentration and Ratio of Uranium Isotopes in U.S.A. Military Personnel Deployed at Samawah, Iraq at Operation Iraqi Freedom”
http://www.umrc.net/pdf/ESRB_2004.pdf

“Concentration and Ratio of Uranium Isotopes in the Fine-Fraction of Surface Soil from Baghdad and Basra collected after Operation Iraqi Freedom”
http://www.umrc.net/pdf/HPS_2004.pdf

- **Undisclosed weapons containing uranium (i.e. self-forging penetrators, shaped-charges and EFP's)**

UMRC's field research indicates that undisclosed weapons used by US and UK forces contain uranium:

“The US and UK deploy new uranium weapons contaminating Iraq's environment, civilians and the Coalition's own troops”
http://www.traprockpeace.org/tedd_veyman_10aug04.html

UMRC's DU Screening Program – what does it involve?

1. Patient or patient representative supplies UMRC with Exposure and Health History: We review of applicant's exposure and health history (applicant submits by mail or electronically, UMRC's Self Assessment Questionnaire.

Download here: UMRC **Self assessment Questionnaire**
http://www.umrc.net/pdf/self_assessment.pdf

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2. UMRC interviews of applicant or applicant's representative re: deployment and exposure history and medical condition.
3. Applicant collects 24-hour urine sample (UMRC protocols for 24-hour sample collection, clean sample procedures).
4. The applicant provides UMRC with (1) Release Waiver (permission to use laboratory findings and patient medical information for scientific study purposes); (2) a UMRC and patient sign a Confidentiality Agreement (i.e. protecting the name and private medical information of the patient).
5. UMRC laboratory assays the (1) total concentration of uranium (i.e. the abundance of uranium excreted in the urine) and (2) determines the quantity of uranium isotopes 234U, 235U, 236U and 238U).
6. UMRC analyses the laboratory findings to determine if the patient is contaminated, and if so, to what type of uranium (i.e. military uranium, depleted, natural, dirty uranium, etc).
7. If the patient is determined to be contaminated, we may arrange further detailed Patient Clinical Assessments by one of UMRC's physicians and laboratories (i.e. chromosome analysis; kidney function studies; organ studies of ballistic uranium particle uptake and incorporation).
8. UMRC provides the patient and or representative: (1) Clinical observations and bioassay results report; and, (2) may provide consultation and advice to the patient and or his/her physician regarding progressive clinical studies and treatment options, where applicable.
9. UMRC may use the laboratory and clinical data in scientific studies, proceedings and publications, subject to the conditions of confidentiality agreed to with the patient(s).

UMRC's field staff contaminated by DU in less than three weeks of travel in Iraq

"Warning of uranium contamination risks to NGO staff, Coalition forces, foreign contract personnel and civilians in Iraq, Uranium Medical Research Centre"
<http://www.health-now.org/site/article.php?menuId=14&articleId=33>

Fees and costs

Steps 1 – 9 (above) are UMRC's basic uranium contamination and clinical effects assessment procedure. The process provides UMRC with the laboratory and clinical information needed as the raw material (i.e. basic clinical, chemical and physical data) to support our scientific investigations, studies and reports and to provide patients with medical diagnostic evaluation and lab reports.

UMRC does not charge patients who participate in this program but patients or their sponsors are required to pay the costs of the laboratory analysis (i.e. the urine uranium

bioassay). The cost is approximately \$1,200.00 US, and changes periodically depending on currency exchange rates, secure bio-specimen transportation costs, and laboratory procedure costs. If patients travel to UMRC's clinic for a clinical assessment and appointments with our physicians, the patient is responsible for the cost of travel and living. There are no charges or fees for our physicians' services.

No UMRC staff member or associate involved in the UMRC Bioassay and Clinical Studies Program is paid or receives any form of income from participating in or providing professional or technical support to the program.

UMRC's urine uranium bioassay is conducted in a secure, state of the art and clean-lab certified geo-chemistry laboratories in Europe and Japan. Please note that urine uranium bioassays cannot be conducted in clinical or medical laboratories. Specialized chemistry and geological research laboratories are required. The laboratory analysis is done by doctoral, post doctoral researchers and university faculty in the fields of chemistry and geo-chemistry. The mass spectrometers used in the UMRC program measures accurately, uranium and transuranics (i.e. isotopes of plutonium, and reactor products such as ²³⁶U) isotopes at the quantity called a femtogram - 1 part uranium per trillion parts of the sample.

UMRC's Uranium Bioassay and Clinical Studies Program are conducted under the supervision and direction of doctors and physicians. Patient and process control, clinical assessments, bioassay results analysis and clinical reports to patients and their physicians are managed by UMRC's medical staff and associate staff. It is essential that a physician manages, analyses, and interprets your bioassay. Bioassay results provided directly from a laboratory do not constitute a medical or clinical report. Participants in UMRC's program become patients. They are protected by physician-patient privilege, confidentiality and the license and qualifications of that physician. Geologists and chemists are not medical doctors. Legally, UMRC's patient bioassay and clinical reports are medical and physician reports.

Patients are cautioned and advised not to arrange bioassay studies directly with laboratories. Bioassay raw data provided directly from a geochemistry or environmental research or analytical laboratory or supplied by a chemist or physicist does NOT constitute a medical or physician's report and cannot be introduced as medial evidence or submitted as medical documents in a legal proceedings, class or individual actions, or occupational insurance claims. UMRC assumes no responsibility for any biological specimens sent to its laboratories or professional staff associated with our program without explicit and prior arrangements with UMRC.

Sending files and lab reports to UMRC

UMRC does not accept unsolicited or unplanned medical files or laboratory reports. Please make sure you call or write to arrange our involvement before sending anything to our offices. Summarized and interpreted data by lab technicians, chemists and non-clinical staff not associated with our program will not be verified or used by UMRC. UK and UD Defense department laboratory readings forwarded to UMRC must contain the original lab instrument readings.

Cautions to applicants – Defense departments' misinformation about bioassays

UMRC has noticed that some anti-DU activists and certain pro-DU weapons advocates have made claims that \$1000.00 US per urine uranium bioassay is unusually expensive and that they can arrange bioassays for less than \$100.00 per sample. These critics are referring to Urine Creatinine studies. They refer to methods that do NOT analyze radioisotopes or provide uranium bioassays. A creatinine study is NOT a bioassay.

Creatinine studies cannot tell you or your doctor if you have been contaminated by Depleted Uranium or other military and industrial radionuclides. Creatinine studies do not accurately represent the needed quantitative radionuclide data necessary to determine if you have been contaminated, and if so, by what materials. DoD/DVA creatinine studies are NOT uranium bioassay studies and cannot be considered reliable or proper medical tests to confirm or rule out DU battlefield and ballistic uranium contamination.

- Creatinine: What it is and why it's important?
http://www.transweb.org/qa/qa_txp/faq_creat.html
- **Defense and State Department misinformation – how they keep you from knowing**

The US and UK defense departments' DU screening programs require veterans to be excreting in urine, 50 nanograms (ng) of uranium per liter of urine in order to become eligible for DU bioassays. 50 ng/l of uranium is 600 % or higher than the average US, British and Canadian population for total uranium. A standard of 50 ng/l is used to prevent veterans from being permitted to proceed through the DU Screening program – the protocol eliminates applications if they have less than 50 ng/l total uranium.

The Defense department uses the recent data from The National Report on Human Exposure to Environmental Chemicals <http://www.cdc.gov/exposurereport/> to rule out any veterans with less than 50 ng/l of uranium in their urine excretions. This misrepresents the biokinetic facts of inhalational uranium contamination and it misuses the Center for Disease Control findings: See: Results by Chemical Group for Uranium http://www.cdc.gov/exposurereport/3rd/results_01.htm

By the time a veteran sees a DVA physician, post-deployment (and the rule is that no urine is collected for DU analysis in the theater of war) the levels of uranium will have dropped, often below the cut-off of 50 ng/l. DU becomes incorporated into organs, lung tissue, bones and the circulatory system. Through incorporation and clearance of the contaminant and possible dysfunctional effects on kidneys, the veterans may not present with the quantities considered significant.

Contrary to the US Department of Defense and British Ministry of Defense, the total concentration of uranium (i.e. abundance) excreted in urine cannot determine the type and degree of contamination or the origin (i.e. industrial, military, etc) of contamination.

The US State Department has posted on its web site, a section on Misinformation in calls DU contamination an urban legend and states categorically that there is no link between DU and the diseases of those exposed. The State Department is itself misinforming the public. State chooses to omit the fact that Alpha emitters (radionuclides that emit alpha radiation) are classified as carcinogenic by the all nuclear regulatory and environment health agencies. The State Department's position is as brilliant as stating that being run over by a car in the US might kill you but there is no proof that being run over by a truck in Iraq will hurt you.

*“Comments on the Baltimore VA Study of Gulf War (1991) Veteran”, Glen D. Lawrence
Professor of Chemistry and Biochemistry, Long Island University, Brooklyn, NY*
http://www.traprockpeace.org/glen_lawrence_march04.html

DoD Army Center for Health Promotion and Preventative Medicine – fact Sheet on DU showing that the DoD position is to consider kidney damage only, as the outcome of DU contamination
<http://chppm-www.apgea.army.mil/usachppmresources/DepletedUraniumTwoPagesFinalVersionWPI.pdf>

US DoD Deployment Health Clinical Centre showing that inhalational contamination by battlefield uranium is not to be addressed by the protocol or medical research cited by DoD to rule out DU as a cause of Gulf War Illness <http://www.pdhealth.mil/du.asp>

“Medical Effects of Internal Contamination with Uranium” Asaf Durakovic, UMRC
http://www.pnmj.org/02122004_internal_contamination.asp

URANIUM TOXICITY LITERATURE; with Commentaries by Glen D. Lawrence
Department of Chemistry and Biochemistry, Long Island University, Brooklyn, NY
11201, USA

What troops and veterans should know about the DoD and DVA combined DU screening program and medical protocols

“12 year too late? How Canadian and U.S. Defense Departments reveal post-conflict follow-up programs are not capable of detecting Depleted Uranium”

http://www.umrc.net/pdf/12_years_too_late.pdf#search='weyman%20contaminated%20DU'

The published diagnostic protocols of the US, Canadian and British veterans’ post-conflict medical services do not include a category of disease or toxicology that recognizes the etiology of uranium internal contamination. Since the Defense departments do not acknowledge inhalational contamination by radionuclides as displaying a toxicological pattern (other than kidney damage), any veteran’s diagnosis by those who adhere to the Defense protocols cannot be considered to reliably determine or rule out DU contamination.

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