# Uranium Coverup 17/21 - Service to humankind

Official “investigations” suppress evidence of uranium-induced illness and death. In those “studies” Pentagon and other military authorities co-opt research institutes, universities, and international health and safety organizations: UNEP, ICRP, World Health Organization (WHO), International Atomic Energy Authority (IAEA), and other.

From the precautionary principle of environmental and health sciences, uncertain but potentially harmful effects should be prevented. Even if there were “no proofs” of a link from DU to illness and death, it behooved the decision makers to discontinue the use of any uranium weapons out of the precautionary principle, given Gulf veteran complaints and scientific uncertainty. Normally, scientific assessment of the effects of DU and other uranium metals follows a standard risk analysis chain:

Products of combat or accidental use of uranium > Fate in a place over time > Exposure to people and environment > Dose received > Morbidity and mortality effects of uranium.

NATO “scientists” manipulate every step of the analysis. To criticisms, pseudo-science replies, "No evidence exists". Sufficient evidence does exist, as published by independent researchers. The precautionary principle should govern in cases of ambiguous evidence. In summary, the reports have numerous serious flaws because they:

Fail to mention that the concentration of uranium metals used in munitions is orders of magnitude more hazardous than “naturally occurring” uranium that is mixed with other minerals in the ground in a chemical and radiological equilibrium. Dr. Busby counters such argument from the UK Ministry of Defense: “MoD's argument is like saying it's OK to throw pellets of arsenic around for children to play with, just because trace quantities of arsenic arise commonly and naturally in soil, vegetation and drinking water.”

Excuse “natural” uranium as harmless. Even “natural” uranium metal (an alloy of 99.8% U-238, 0.2% U-235 and traces of U-234) turns into deadly fine particles under combat use conditions and in fires.

Concentrate on the toxic aspects of DU and on the "clean" DU while actual DU comprises extremely toxic-radioactive U-236, plutonium, and other transuranics.

Lack early identification and medical monitoring of uranium casualties, and ignore illness due to eroded immunity following exposure, and acute to chronic effects from long-term exposure to small amounts of uranium contamination.

Focus on "healthy soldiers" and relatively weak external radiation from DU metal or the effects of uranium shrapnel in the body, instead of ingested or inhaled particles of soluble uranium oxides (short-term toxic agents) and insoluble ones (long-term toxic and radioactive), also in ceramic form alien to nature.

Calculate the exposure to DU over areas much larger than actually contaminated, while doses -- over volume of internal organs, instead of affected cells.

Adopt the optimistic picture of DU passing from the body and ignore an activity in the lungs, which moves particles into the lymph glands.

Ignore the fact that elimination of soluble uranium overwhelms the kidneys. Insoluble uranium oxide and ceramic uranium oxide may move through the kidney slowly and not cause serious renal toxicity.

Do not emphasize that just one dose on a DU battlefield is bad for the lymph nodes, but a veteran may be present at many such events.

Project morbidity and mortality from ICRP curves that are invalid for internal doses of radiation and insoluble uranium oxide particles.

Conceal the fact that in addition to direct cancers, internal uranium radiation promotes cancers from other factors (the early Balkan cancers could be radiation-promoted).

Prudent scientists do not make mistakes and omissions on known facts. “Epidemiological study” deceptions are plentiful, more so that epidemiology, like statistical analysis, can be manipulated to prove desired results. Apologists of uranium effects compare erroneously estimated incidence of cancers among veterans to statistics for general population. The latter is an incomparable group. Besides, official epidemiological statistics are biased downwards, since “background” radiation includes gradual accumulation of global radioactive pollution. As another example, WHO expeditiously compared DU-like illness incidence in Kosovo before and after NATO bombing. Statistics are incomparable, because of different population base: 300 or 400 thousand opponents of Albanian extremism left Kosovo, but many more immigrants came from Albania. Pre-1999 Kosovo Albanians boycotted the Yugoslav state health care system, so the statistics quoted by WHO are fragmentary at best.

US government has admitted that 50 years of uranium fuel manufacturing has not led to serious epidemiological studies. Previous studies focused on cancer death as a biological endpoint, while ignoring chronic illnesses, deformed children, and other medical problems. Internal radiation dose was never calculated in the A-bomb studies, hence it cannot inform on the biochemical pathways of a particle in the body. Yet, ICRP analytical apparatus relies solely on the false data. NATO “scientists” apply ICRP estimates concerning uranium dust from nuclear industrial processes, and not from aerosols (including ceramic) produced from uranium weapons. Analogies of uranium particles from military use to nuclear industry situations encoded into official data are invalid, because of cover-ups in the industry. Inhalation of uranium dust in nuclear processing is not biochemically equivalent to inhalation of ceramic uranium particles.