DEPLETED URANIUM FACT SHEET

(July 31 1998)

What is Uranium?

Uranium is a weakly radioactive element that occurs naturally in the environment. Each of us ingests and inhales natural uranium every day from the natural uranium in our air, water, and soil. The amount varies depending upon the natural levels found in the area you live and the levels found in the areas where the food you eat and the water you drink are produced. Consequently, each of us has some level of uranium in our body, which is eliminated in the urine. In areas where the natural uranium level in the soil or water is high, these levels can be substantially higher.

Enriched uranium (uranium that is more radioactive than natural uranium) is used in nuclear power reactors and very highly enriched uranium is used in some nuclear weapons.

What is Depleted Uranium?

Depleted uranium (sometimes known as DU) is uranium that is 40% less radioactive than natural uranium, while retaining identical chemical properties.

The United States Armed Forces used depleted uranium munitions and armor for the first time during the Gulf War. Depleted uranium's ability to protect our soldiers' lives was clearly demonstrated. Depleted uranium is the most effective material for these uses because of its high density and the metallic properties that allow it to "self-sharpen" as it penetrates armor. In contrast, antitank munitions made from other materials (tungsten compounds) tend to mushroom and become blunt as they penetrate. Armor containing depleted uranium is very effective at blunting antitank weapons.

What are the health effects of Depleted Uranium?

The major health concerns about DU relate to its chemical properties as a heavy metal rather than to its radioactivity, which is very low. As with all chemicals, the hazard depends mainly upon the amount taken into the body. It has been recognized that natural uranium at high doses has caused kidney damage. The greatest potential for medically significant DU exposure occurred with those veterans who were in or on tanks and other armored vehicles when

the vehicles were hit by DU munitions and in veterans who worked in or on US vehicles or sites contaminated with DU.

Since 1993, the Department of Veterans Affairs has been monitoring 33 vets who were seriously injured in friendly fire incidents involving depleted uranium. These veterans are being monitored at the Baltimore VA Medical Center. Many of these veterans continue to have medical problems, especially problems relating to the physical injuries they received during friendly fire incidents. About half of this group still have depleted uranium metal fragments in their bodies. Those with retained metal fragments have shown higher than normal levels of uranium in their urine since monitoring began in 1993. These veterans are being followed very carefully and a number of different medical tests are being done to determine if the depleted uranium fragments are causing any health problems. The veterans being followed who were in friendly fire incidents but who do not have retained depleted uranium fragments, generally speaking, have not shown higher than normal levels of uranium in their urine.

For the 33 veterans in the program, tests for kidney function have all been normal. In addition, the reproductive health of this group appears to be normal in that all babies fathered by these veterans between 1991 and 1997 had no birth defects.