

DEPLETED URANIUM (DU)

WHAT IS URANIUM?

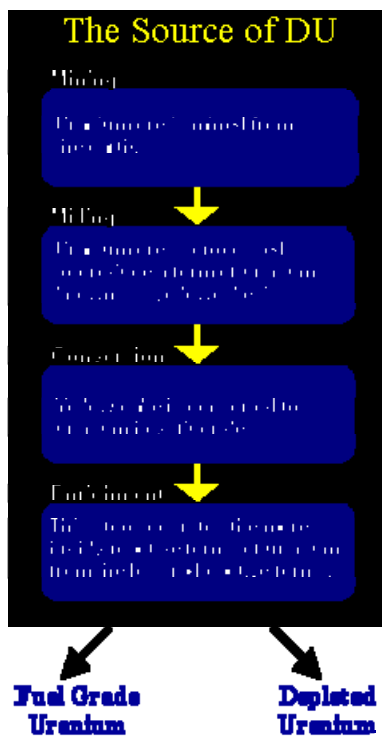
- Naturally occurring element (mined from the earth's crust)
- Found in air, water, soil, and food
- Weakly radioactive
- Small amounts of uranium are consumed and/or inhaled by people on a daily basis



Sweetwater Uranium Mine in Wyoming

WHAT IS DEPLETED URANIUM?

- Depleted uranium is a by-product from the process of converting natural uranium for use as nuclear fuel or nuclear weapons
- The only difference between depleted uranium and natural uranium is that depleted uranium is 40 percent less radioactive.



RADIOACTIVITY OF DEPLETED URANIUM

Depleted uranium emits a small amount of radiation in the form of alpha and beta particles, and gamma rays. Alpha particles are blocked from entering your body by the skin. Beta particles are blocked by clothing. Gamma rays are pure energy and are highly penetrating; however, the amount of gamma radiation emitted by depleted uranium is extremely low.

SOURCES AND USES OF DEPLETED URANIUM

THE BIGGEST USERS OF DEPLETED URANIUM ARE THE UNITED STATES MILITARY AND ALLIED FORCES.

MILITARY USES

- Armor for tanks and other military vehicles
- Armor-piercing munitions



OTHER USES

- Radiation Shielding in Hospitals
- Shielding containers for radioactive sources
- Counter balance weights for yacht keels and aircraft
- Aircraft landing gear
- Ballast in satellites and missiles
- Drilling equipment



POTENTIAL HEALTH EFFECTS OF DEPLETED URANIUM

DEPLETED URANIUM CAN ENTER THE BODY THROUGH:

- Inhaling dust
- Ingestion
- Through open wounds
- Weapon fragments



The major health concerns from depleted uranium relate to its chemical properties as a heavy metal rather than its radioactivity.

RADIATION HEALTH RISKS



- If inhaled or ingested, depleted uranium can produce internal radiation exposure.
- No adverse health effects have been observed from radiation exposure.

CHEMICAL HEALTH RISKS

- Uranium metal concentrates in the bone, kidney and liver.
- The kidney is the most sensitive organ to the effects of depleted uranium.
- High doses of depleted uranium, just like many other heavy metals can damage the kidneys.