NUCLEAR POWER POISONS

Man-made nuclear fission creates about 200 radioactive isotopes that do not exist in nature. Nuclear power plants routinely release these radionuclides into the environment. Living organisms try to make sense of these unnatural isotopes, so they identify them as the elements they most closely resemble, absorbing and processing them as those analogs. Some isotopes created by and released from nuclear reactors burn out quickly, but others remain radioactive for millions of years.

Radiation poisoning is invisible and insidious. There is no safe dose. Some people appear more resistant than others, but radiation poisoning is cumulative and children are extremely vulnerable because their cells are dividing rapidly. Studies show childhood leukemia rates double near nuclear power plants. Women and the unborn are also at high risk. Birth defects include downs syndrome, cleft palate or lip, congenital malformations, spinal defects, kidney, liver damage and more.

There are three forms of radiation: Gamma passes through the human body, like X-rays, but can mutate regulatory and reproductive genes and is especially dangerous if inhaled or ingested. Alpha radiation does not penetrate human skin, but if inhaled or ingested is extremely mutagenic inside the human body. Beta radiation is light weight, can travel long distances, and is also very mutagenic and carcinogenic.

IODINE-131 is a very volatile radioactive isotope with a half-life of 8 days, which means its radioactive for about 80 days. It is a beta and a high-energy gamma emitter, and as such is very carcinogenic. It enters the blood stream through the alveoli in the lungs or can be ingested by eating contaminated foods or milk. It is avidly absorbed by the thyroid gland at the base of the neck, and children are at very high risk of exposure. Potassium iodide pills cannot prevent this absorption, but the pills can slow it.

CESIUM-137 is a POTASSIUM analog and mimics potassium in every cell of the human body. It deposits in human muscles where it irradiates muscle cells and nearby organs. Cesium-137 is a dangerous beta emitter with a half-life of 30 years and is highly carcinogenic.

STRONTIUM-90 is a CALCIUM analog that the human body mis-identifies and absorbs as calcium. Strontium-90 is a beta emitter with a half-life of 29 years, which means it is radioactively dangerous for about 300 YEARS. Strontium-90 released from nuclear power plants lands on the soil and is taken up by grass and concentrated in cows and goats milk and in the breasts of lactating women. Children and babies should not drink this milk, as it can induce bone cancer and leukemia in the child's body years later.

PLUTONIUM, named after the Greek god of hell, is one of the most dangerous substances on earth and is produced by fission. It is extremely toxic and carcinogenic if inhaled - even a tiny amount can cause lung cancer and it moves from the lungs through the blood to other organs. It enters lymph glands via white blood cells and can mutate regulatory genes causing lymphoma or leukemia. An iron analog, it enters bone marrow and hemoglobin in red blood cells. It irradiates bone cells causing bone cancer and white blood cells in bone marrow causing leukemia. It is stored in the liver, causing liver cancer, and crosses the placenta into a developing embryo. Plutonium is also stored in the testicles, adjacent to spermatocytes, causing mutations in reproductive genes, increasing genetic diseases in future generations, and causing testicular cancer in men. Pu-239's half life is 24,000 years, remaining radioactive for about 240,000 years.

TRITIUM is a radioactive form of hydrogen, (H3), and a gas waste product created by nuclear reactors. If ingested, Tritium is extremely dangerous as it behaves like water passing throughout the body and is incorporated in organic molecules capable of irradiating large numbers of cells. Tritium is a beta emitter that travels through air or water and has a half-life of 12.5 years, remaining dangerous for about 125 years. There are three potential health effects from the ingestion of Tritium: cancer; genetic mutations; and damage to fetuses as it crosses the placenta.

Learn more @ MATRR.org – Because It Matters
IONIZING RADIATION'S EFFECT ON THE BODY

SKIN
(RADIONUCLIDE) URANIUM 238
PLUTONIUM 239
COBALT 60
Skin Cancer

(BREASTS)
PLUTONIUM 239
CESIUM 137
STRONTIUM 90
Breast Cancer

LIVER
COBALT 60
Liver Cancer - higher death rate in women

OVARIAS
- Attacked by all radioactive isotopes emitting gamma radiation.
- PLUTONIUM 239 known to concentrate in the ovaries or testes.
Birth defects, mutations and miscarriages.

MUSCLE
POTASSIUM 42
CESIUM 137
Sarcoma - cancer of muscle tissue

WHOLE BODY
TRITIUM
Breast Cancer
Intestinal Cancer
Down Syndrome

THYROID
(RADIONUCLIDE) IODINE 131
Thyroid Cancer - women are three times as likely to be affected as men

LUNGS
URANIUM 234
PLUTONIUM 239
KRYPTON 85
Lung Cancer - much higher rate among uranium miners

SPLNEEN
POLONIUM 210
Lymphoma - cancer of the blood cells

KIDNEYS
RUTHERIUM 106
Kidney cancer - difficult to detect, hard to stop after 5 yrs.

BONE
RADII 226
STRONTIUM 90
YITRIUM 90
PROMETHEIUM 147
BARIUM 140
THORIUM 234
CARBON 14
PLUTONIUM
Leukemia - an overproduction of abnormal white blood cells which can be treated to some extent.