

AUGUST MARKS THE 60th ANNIVERSARY OF NUCLEAR WEAPONS USAGE.

60 YEARS, THEN AND NOW – compiled by the La Crosse Hiroshima/Nagasaki Events Committee, July 2005

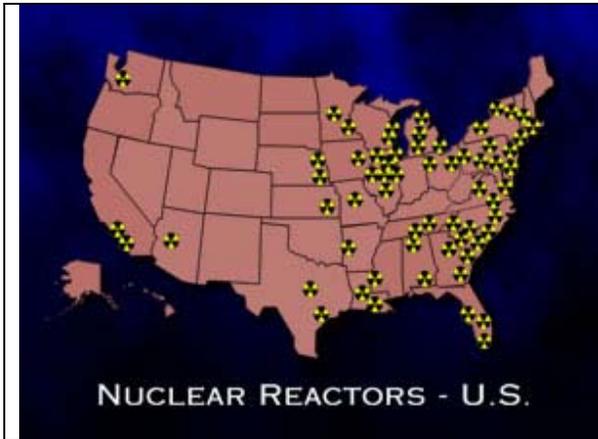
NUCLEAR REACTORS

60 years ago:

There were no nuclear reactors, except for perhaps an experimental one or two.
The only source of concentrated radioactivity in the world was radium.
The entire amount in the world came to a total of 1000 curies.

Today:

There are 103 operating nuclear reactors in the U.S., and 442 worldwide.
A single nuclear power plant can contain radioactive materials equal to 20 billion curies of radium. (20,000,000,000). Each 1,000-megawatt reactor contains as much long-lived radioactive material as would be produced by 1,000 Hiroshima-sized bombs.
Each reactor also produces 500 pounds of plutonium annually. – *Dr. Helen Caldicott*



There have been many accidents and close calls at nuclear reactors, the worst being at Chernobyl, in the Ukraine, in 1986.

The relative size of the area of Chernobyl that became contaminated by the accident is about 61,000 square miles - slightly larger than the state of Georgia.

There have been significant accidents in the U.S. too. The most serious was at Three Mile Island in Pennsylvania in 1979. The most recent was a near-catastrophe at the Davis-Besse reactor in Ohio, in 2002. The NRC has described the neglect there as one of the biggest safety letdowns in the nuclear industry's performance history.



AMOUNT OF NUCLEAR WASTE GENERATED

88,000 tons of highly radioactive waste sits in cooling pools next to the 103 U.S. nuclear power reactors, awaiting transportation to a storage facility yet to be found. It is slated to travel through 39 states on roads and railway lines for the next 25 years: at least 15,000-45,000 shipments.

There are 442 nuclear reactors across the world. Each typical 1000-megawatt nuclear reactor manufactures 33 tons of thermally hot, intensely radioactive waste per year.

The energy bill passed by Congress in July 2005 contains over \$10 billion for building a new generation of nuclear power plants, including loan guarantees, tax credits, limited liability in the case of an accident, research and development funding, etc.

NUCLEAR WEAPONS - MANUFACTURED

60 years ago:

The U.S. arsenal contained THREE nuclear weapons, and they detonated them all. They were named.

Trinity – exploded over the New Mexico desert July 16 1945, as a test

Little Boy – exploded over Hiroshima – August 6 1945

Fat Man – exploded over Nagasaki – August 9 1945

Today:

On 6 August 2003, the anniversary of the bombing, the Atomic Bomb Hospital in Hiroshima reported that the number of people killed directly and after exposure to radiation had reached 231,920. An estimated 140,000 had died by the end of 1945. That from the one bomb.

According to the *Bulletin of Atomic Scientists*, of the 7,000-20,000 U.S. nuclear warheads, 2,500 are maintained on hair-trigger alert, ready for launching. According to the *Center for Defense Information*, in order to effectively retaliate, the commander of the Strategic Command has only three minutes to decide if a nuclear attack warning is valid. He has 10 minutes to find the president for a 30-second briefing on attack options. And the president has three minutes to decide whether to launch the warheads and at which targets.

Once launched, the missiles would reach their Russian targets in 15 to 30 minutes.

There are eight other countries in the world which are known to possess nuclear weapons.

NUCLEAR WEAPONS – USED

60 years ago:

In 1945, the U.S. became the only nation ever to use nuclear weapons deliberately on a civilian population.

Today:

Depleted Uranium – a byproduct of nuclear manufacturing - has been used in our weapons in wars in:

Yugoslavia (1999)

Bosnia (1995)

Afghanistan (starting in 2001)

Iraq (1991 – present, ongoing)

In Iraq alone, the best estimates are that 380 metric tons of DU munitions were shot into Iraq & Kuwait in 1991 and another 170 tons in 2003.

-Nukewatch

Vice President Dick Cheney has reportedly ordered that plans be drawn up for using tactical nuclear weapons in a first-strike war against the nation of Iran.

–Philip Giraldi, American Conservative magazine, June 2005

Some numbers related to Depleted Uranium:

- “Our studies indicate that more than forty percent of the population around Basra will get cancer. We are living through another Hiroshima”-- *Dr. Jawad Al-Ali, an oncologist and member England's Royal Society of Physicians, quoted by islamonline.net, 5/15/03*
- “Depleted uranium (DU) is the highly toxic and radioactive byproduct of the uranium enrichment process.... Depleted uranium is roughly 60% as radioactive as naturally occurring uranium, and has a half life of 4.5 billion years. As a result of 50 years of enriching uranium for use in nuclear weapons and reactors, the U.S. has in excess of 1.1 billion pounds of DU waste material.”-- *Dan Fahey, “Metal of Dishonor” (1997)*
- “Drought-stricken Afghanistan's underground water supply is now contaminated by these [DU] nuclear weapons. Experts with the Uranium Medical Research Center report that urine samples of Afghanis show the highest level of uranium ever recorded in a civilian population.” -- *Amy Worthington, Idaho Observer, April 2003*
- “By now, half of all the 697,000 U.S. soldiers involved in the 1991 war have reported serious illnesses. According to the American Gulf War Veterans Association, more than 30 percent of these soldiers are chronically ill and are receiving disability benefits from the Veterans Administration.”-- *Sara Flounders and John Catalinotto, Swans Commentary, 2/2/04*
- “Gulf War Syndrome not only killed, maimed, and made soldiers sick, they brought it home. In a study of 251 Gulf War veterans' families in Mississippi, 67 percent of their children were born without eyes, ears or a brain, had fused fingers, blood infections, respiratory problems or thyroid and other organ malformations.”-- *Leuren Moret, environmental geologist, San Francisco Bay View, 11/7/01*

AMOUNT OF MONEY SPENT

The United States' annual expenditure for nuclear weapons and weapons-related infrastructure is \$40 billion, or roughly \$135.00 per person.

AMOUNT OF RADIATION UNLEASHED

“1951-1963: The USA set off at least 183 atmospheric nuclear tests, more than all the other nations of the world combined. About half these tests were set off near the Pacific Trust Territory of Micronesia, and the other half were set off on the 1,350 square miles at the Nevada Test Site north of Las Vegas.

1963-1978: By 1978 the USA had set off an additional 400 nuclear bombs below ground in Nevada, some of which were officially admitted to have `leaked' large amounts of radioactive chemicals.

post-1978: Underground tests were still taking place in the USA, the USSR and French Polynesia. In the Northern Hemisphere, above-ground tests were also detonated by the USSR, China and India and in the Southern Hemisphere by France and South Africa.

...The Nevada nuclear tests have spread radioactive poisons throughout central and eastern United States and Canada, and produced in the stratosphere a layer of radioactive material which encircles the globe. They also cause nitric oxides to form in the atmosphere which then descend on earth as acid rain. Radioactive chemicals can now be found in the organs, tissues and bones of every individual in the Northern Hemisphere, and the contamination from past nuclear explosions will continue to cause environmental and health problems for hundreds of thousands of years, even if all nuclear activities are stopped today.

...The total global dose commitment for each individual from all nuclear explosions carried out before 1976 ranges from about 100 - 200 millirad. In the northern temperate zone the values are about 50 percent higher, and in the southern temperate zone about 50 percent lower than these estimates.” *–excerpted from No Immediate Danger: Prognosis for a Radioactive Earth, by Dr. Rosalie Bertell.*

These numbers don't include the amounts of radiation released by accidents such as Chernobyl, by the routine operation of nuclear reactors, or the deliberate use of depleted uranium in modern warfare.

Dr. Bertell says that at least 50 million cancer deaths so far (a conservative estimate) can be contributed to man-made radiation releases. She estimates, currently, 5 million cancer deaths a year worldwide as a result of nuclear reactor operation.

Some of the known U.S. locations badly polluted by nuclear contamination:

Hanford Reservation (Richland, Washington); Idaho National Engineering Laboratory (Idaho Falls, Idaho); Lawrence Livermore National Laboratory (Livermore, Calif.); Los Alamos National Laboratory (Albuquerque, New Mexico); Mound Laboratory (Dayton, Ohio); Nevada Test Site (Jackass Flats, Nevada); Oak Ridge Gaseous Diffusion Plant (Oak Ridge, Tenn.); Paducah Gaseous Diffusion Plant (Paducah, Kentucky); Pantex Plant (Carson County, Texas); Portsmouth Uranium Enrichment Complex (Piketon, Ohio); Rocky Flats (Denver, Colo); Sandia National Laboratories (Albuquerque, New Mexico); Savannah River Plant (Augusta, South Carolina).