

Question Box

Frequently Asked Question



**Is there still radiation in Hiroshima and Nagasaki?
Even now, if people go to Hiroshima or Nagasaki,
might they be affected by radiation?**



The atomic bomb differed greatly from conventional bombs made of chemical explosives in that it released vastly more energy and some of that energy was in the form of radiation. About 5% of the energy released was in the form of initial radiation and about 10% was residual radiation.

Breakdown of Energy Released by the Atomic Bomb

http://www.pcf.city.hiroshima.jp/kids/KPSH_E/hiroshima_e/sadako_e/subcontents_e/08higai_1_e.html

"Initial radiation" refers to the radiation that was released the instant the bomb exploded. This radiation did tremendous damage to human bodies. Nearly everyone who was directly exposed within one kilometer of the hypocenter received enough radiation to kill them. (For more detail, see Damage from Radiation.)

http://www.pcf.city.hiroshima.jp/kids/KPSH_E/hiroshima_e/sadako_e/subcontents_e/08higai_4_e.html

Residual radiation (Note 1) appeared as the initial radiation subsided. About 80% of the total amount of residual radiation was released within 24 hours of the bombing. One study found that a person standing at the hypocenter 24 hours after the bombing would have received only one thousandth the dose of residual radiation that would have been received by a person who was there right after the bomb exploded. One week later, the dose would be only one millionth the original dose. (Note 2) In other words, residual radiation levels fell very rapidly.

Today, the background radiation in Hiroshima and Nagasaki is the same as the average amount of natural radiation present anywhere on Earth. It is not enough to affect human health.

Note 1) Residual radiation is radiation induced by

radioactive substances produced after the bomb exploded (including radioactive by-products of fission), the uranium that did not undergo fission, and atomic nuclei (in soil, rubble, and other materials) that became radioactive after being struck by initial radiation.

Note 2) Based on calculations of gamma radiation released due to induced radioactivity.

