
II. RADIOACTIVITY

HISTORY OF NUCLEAR TESTING

Since 1945 there have been more than 2000 nuclear tests on earth carried out by the eight nuclear weapon states. The United States and Russia are responsible for more than 80% of those tests.

State	Aboveground	Underground	Total number
USA	215	815	1030
Russia	219	496	714
China	23	22	45
France	50	160	210
Great Britain	21	24	45
Pakistan	6	6	12
India	6	6	12
North Korea		5	5
TOTAL	528	1534	2061

Nuclear tests worldwide (9.10.2016)

How it all started

It was July 16th 1945 as *Gadget*, the worldwide first nuclear, had been launched in the desert of New Mexico under the covert name *Trinity*. This so called nuclear big bang had an explosive force of about 21 kilotons TNT equivalent. 200 grams of TNT are sufficient to kill one human. The explosion has been covered by the US military as an explosion of an ammunition depot. It had not been confirmed as a nuclear test until the day of the bombing of Hiroshima on August 6 1945.

Impacts

Nuclear tests aboveground, in the atmosphere or underwater caused immediate harms for existing and also successive generations. Those underground resulted in the release of radioactive gases to the surface by and by. In accordance with a study from the "International Physicians for the Prevention of Nuclear War" (IPPNW) the estimated number of casualties by tests aboveground raised to a total number of 430.000 until the year 2000.

Containment of further tests

Since 1992 the United States renounce self-determined more nuclear tests. Russia carried out its last test in 1990, Great Britain in 1991 respectively. France followed in 1995, China in 1996, India and Pakistan in 1998. The nuclear tests by North Korea in 2006, 2009, (2010), 2013 and 2016 are the last nuclear tests worldwide so far.

In 1963 the Partial Test Ban Treaty (PTBT) was created in Moscow. It banned nuclear tests in the atmosphere, underwater or in space. It had been the forerunner for the Comprehensive Test Ban Treaty (CTBT).