



Nuclear weapons today

Today, nine nations possess several thousand nuclear weapons, posing a unique existential threat to people everywhere. Many hundreds of them are maintained on high alert, ready for use within minutes.

They are in missile silos, aboard aircraft and on submarines patrolling the oceans at all times. Some can travel thousands of kilometres, across continents, to reach their targets.

Most have vastly greater explosive yields than the bombs dropped on Hiroshima and Nagasaki at the dawn of the nuclear age. The largest ones are equal in force to more than a million tonnes, or one megaton, of the conventional chemical explosive TNT.

Even so-called “tactical” nuclear weapons, which are intended for use in the battlefield, can have explosive yields 20 times that of the Hiroshima bomb.

A single nuclear-armed submarine can carry a dozen or more ballistic missiles, each equipped with several nuclear warheads, with a combined capacity to destroy over a hundred cities.

People living near military bases where nuclear weapons are deployed face an especially high risk of becoming victims of a nuclear attack, or suffering harm from an accidental nuclear explosion. Due to government secrecy, some of these people may even be unaware of their proximity to the weapons.

Nuclear-armed nations

Nine nations have nuclear weapons today: the United States, Russia, China, France, the United Kingdom, India, Pakistan, Israel and North Korea. The Russian and US nuclear arsenals are by far the largest.

Most nuclear weapons are not simply in storage. They are actively deployed – poised for use at any moment – and governments are engaged in costly programmes to enhance and expand their arsenals, under the guise of “modernisation”.

Some nuclear-armed nations are developing new types of nuclear weapons, testing new systems for their delivery and expanding their doctrines for possible nuclear use. All appear intent on retaining their nuclear forces for the indefinite future.

Proliferation concerns

The failure of nuclear-armed nations to disarm has heightened the risk that more nations, or even non-state actors, will one day acquire nuclear weapons. Achieving progress in disarmament is essential to preventing their spread.

While important measures are in place to guard against proliferation, the effectiveness of these measures cannot be guaranteed. Any nation capable of enriching uranium or reprocessing spent nuclear fuel to produce plutonium could, in theory, develop a nuclear weapon in a matter of months.

South Africa, Israel, India, Pakistan and North Korea all acquired nuclear weapons using facilities and materials that were ostensibly for “peaceful purposes”, underscoring the proliferation risks inherent in nuclear power programmes.

Just a few kilograms of highly enriched uranium or separated plutonium would be enough to produce one nuclear bomb. Today, hundreds of tonnes of these materials exist in global stockpiles, with more being produced. For disarmament to succeed, this problem must be addressed.

Complicit nations

While only nine nations possess nuclear weapons, more than 30 others support their retention and potential use, including by claiming protection from an ally's so-called “nuclear umbrella”.

All members of the North Atlantic Treaty Organisation (NATO), for example, have publicly endorsed nuclear weapons. Several even host US nuclear bombs on their territories – including Belgium, Germany, Italy, the Netherlands and Türkiye – and provide the aircraft and personnel needed to drop them. Belarus has a similar hosting arrangement in place with Russia.

Some nations share intelligence for the purpose of nuclear targeting, or allow nuclear-armed ships to transit through their waters and dock in their ports or nuclear-armed aircraft to enter their airspace and refuel at their airports.

All such acts of complicity perpetuate nuclear dangers and undermine disarmament efforts.



Protesters in Germany blockade a military base where US nuclear bombs are stationed.
Credit: Ralf Schlesener

A Russian nuclear missile at a military parade in 2023. Credit: Russian government

US nuclear missiles on display at a museum. Credit: US government

