

Research Briefing

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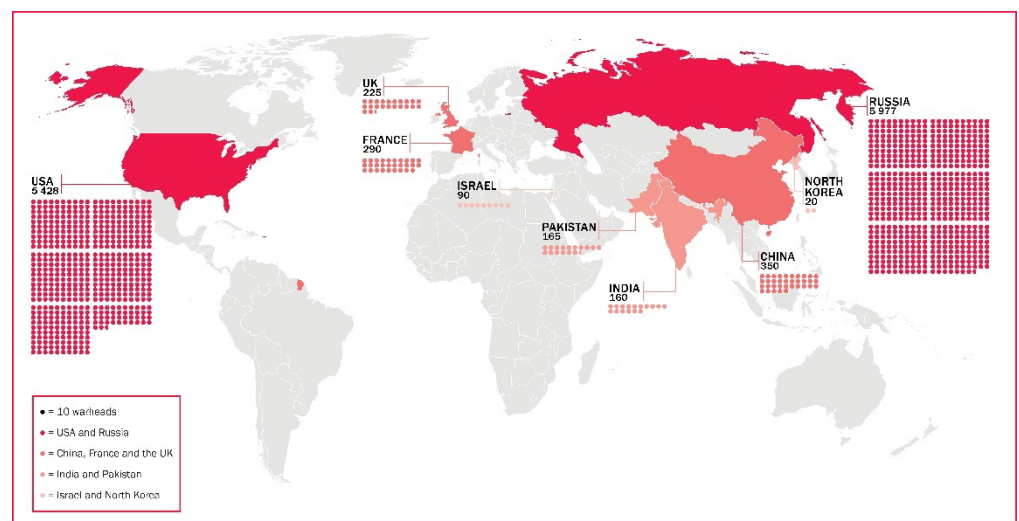
Overview: Where are all the world's nuclear weapons?

There are nine countries in the world that possess nuclear weapons: United States, Russia, the UK, France, China, Israel, India, Pakistan and North Korea.

Between them they hold an estimated 12,705 nuclear warheads. Of those, 9,440 are thought to be operational nuclear warheads, including those kept in reserve. The remainder are awaiting dismantlement.

Roughly 90% of the total global nuclear weapons inventory is held by the United States and Russia, which retains the largest nuclear arsenal.

Picture 1 Global nuclear weapon inventories 2022



SIPRI, Yearbook 2022: World Nuclear Forces

The United States also has approximately 100 tactical nuclear weapons forward deployed at six bases in five European NATO countries: Belgium, Germany, Italy, Netherlands and Turkey. US nuclear weapons were removed from Greece in 2001 and from the UK in 2008.

The New START treaty is the only arms control agreement in existence which limits US and Russian strategic nuclear weapons. There are no arms control limitations on tactical (non-strategic) nuclear weapons.

Status of the nuclear weapon states

The status of the nuclear weapon states differs significantly within the international community.

NPT recognised nuclear states

Under the Nuclear Non-Proliferation Treaty (NPT) a nuclear weapon state is defined as one that manufactured and exploded a nuclear weapon, or other nuclear explosive device, prior to 1 January 1967.

As such, there are five acknowledged nuclear weapon states under the treaty:

- United States – the first country to demonstrate a nuclear weapons capability in 1945 and, so far, the only state to have used such weapons in conflict.
- Russia (formerly the Soviet Union) - tested its first atomic weapon in 1949. Following the collapse of the Soviet Union in 1991, Russia was formally recognised as the sole nuclear weapon state under a Protocol to the US-Soviet Strategic Arms Reduction Treaty, which was signed in May 1992.
- United Kingdom - conducted its first nuclear weapons test in 1952.
- France – conducted its first nuclear weapons test in 1960.
- China – conducted its first nuclear weapons test in 1964.

All five states are in the process of either modernising or replacing their nuclear arsenals. As such the number of nuclear weapons is expected to grow in the coming decade.¹ China and the UK are the only declared nuclear weapon states to have expanded their nuclear stockpiles in recent years.

¹ SIPRI, [Press release](#), 13 June 2022

De facto nuclear weapon states

Those countries which have developed a nuclear capability outside of the NPT framework are considered de facto nuclear weapon states. At present there are three states that have pursued this path: India, Pakistan and Israel. India and Pakistan are actively expanding their nuclear arsenals. Both are continuing to produce and stockpile weapons grade fissile material and developing new delivery systems for their respective nuclear deterrents.

Nuclear capable

Despite having conducted several nuclear tests and demonstrated its missile capabilities, including intercontinental ballistic missiles, North Korea is not officially recognised by the international community as a nuclear weapons state. It is, however, acknowledged as nuclear capable and since 2011 North Korea's nuclear programme has accelerated.

Threshold states

Over the years various states have been identified as nuclear threshold states, either by default due to the sophistication of their civilian nuclear programmes,² or because of their nuclear weapon aspirations.

Several of those latter countries, most notably South Africa, have unilaterally renounced their nuclear weapons programmes and adopted non-nuclear status under the NPT.³ Others have attempted to develop, or have been alleged to be developing, illicit nuclear weapons programmes in contravention of their NPT obligations. Iran is one such state.⁴

² These countries have advanced civilian nuclear sectors which, by default, provides the technology, resources and know how to develop a nuclear weapons programme, in a relatively short space of time (6-24 months), should it be in their national interest to do so. Japan is frequently cited as an example as a country with a "virtual nuclear arsenal".

³ South Africa, Brazil and Argentina gave up advanced programmes during the 1990s and entered into the NPT regime as non-nuclear weapon states. Of the three, South Africa had made the greater progress, having successfully produced a small arsenal of around six weapons by the late 1980s. Taiwan had also pursued a covert nuclear weapons programme during the 1960s and 1970s, but halted its efforts under international pressure.

⁴ Iraq and Libya have also attempted to develop illicit nuclear weapons programmes. Following Iraq's defeat in the 1991 Gulf War, Iraq was forced to verifiably dismantle it under the supervision of UN inspectors. In December 2003 Libya revealed it had been running an illicit nuclear weapons programme in violation of its NPT obligations, but would henceforth renounce all weapons of mass destruction.

Further reading

- House of Commons Library, [Nuclear weapons - at a glance](#). A series of papers on the policies, capabilities and modernisation programmes of the nuclear weapon states.

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