

Introduction

“The World’s Nuclear Warheads Count” is an easily understood illustration of the current state of the world we live in, showing approximately 15,000 nuclear warheads in the world by country and by type.

The PCU Nagasaki Council for Nuclear Weapons Abolition (PCU-NC) and the Research Center for Nuclear Weapons Abolition, Nagasaki University (RECNA) began producing this poster in 2013 as an educational resource for all audiences, from elementary school students to adults.

As part of the peace education efforts carried out every August at Hiroshima’s and Nagasaki’s Atomic Bomb Memorials, we present annual updates on the latest information every June.

The detailed data of this poster, which was compiled by the “RECNA Nuclear Warhead Data Monitoring Team,” including RECNA staff, has been published on our website. (<http://www.recna.nagasaki-u.ac.jp/recna/en-nuclear>) Please see the website for further details. This data is updated from time to time.

We hope this guide will aid those using the poster in understanding background information and terminology in simple, plain terms. It should be especially useful in the education field, particularly in schools.

July 2017

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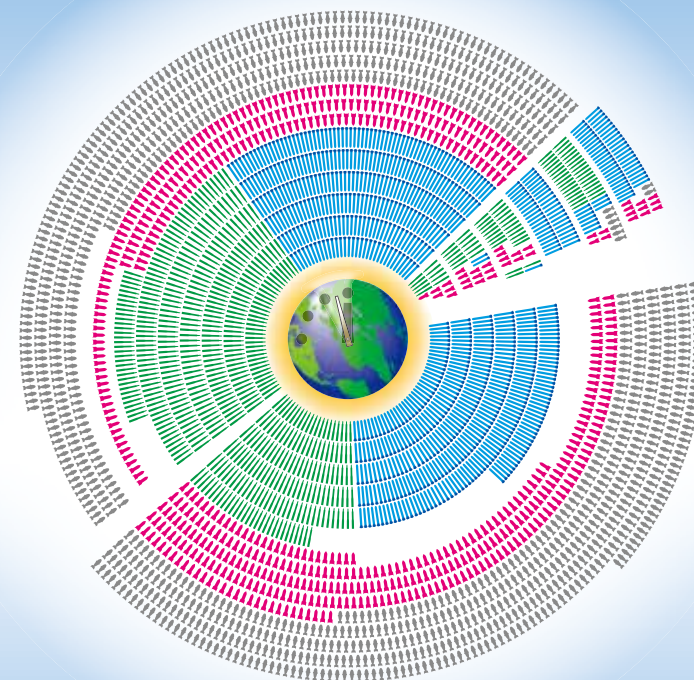
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A Guide to the World’s Nuclear Warheads Count July 2017



14,900

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Frequently Asked Questions

Q1. What is the difference between a “nuclear warhead” and a “nuclear weapon” ?

The fact that atomic bombs were dropped on Hiroshima and Nagasaki by U.S. B29 bombers is well known. Nowadays, there is a diverse range of nuclear weapons, including various kinds of missiles, artillery shells, and torpedoes, in addition to nuclear bombs similar to the ones dropped on Hiroshima and Nagasaki. A “warhead” is the part of a nuclear weapon that causes an explosion. A nuclear warhead is the heart of the weapon, but the warhead alone is not considered a weapon. Complete nuclear weapons consist of a number of parts, including components that can detonate the bomb at any specific altitude and guide it towards its target. Except for bombs that are dropped in a freefalling manner, nuclear bombs are often equipped with an engine. Since bombs are designed to be compact, it can be difficult to distinguish where the warhead is exactly located. If the nuclear warhead and the missile that carries it are separable, the missile is called a “delivery vehicle”.

Q2. What is the difference between a “nuclear weapon” and an “atomic bomb”?

An atomic bomb is a type of nuclear weapon. Nuclear weapons are roughly divided into two types: atomic bomb and hydrogen bomb. An atomic bomb uses the energy released by the fission of a uranium or plutonium nucleus. On the other hand, a hydrogen bomb uses the more powerful energy from the fusion of hydrogen nuclei. The nuclear fusion process requires a high temperature and pressure, triggered by an atomic bomb explosion. Nearly all modern nuclear weapons produce a large

amount of energy by using a combination of nuclear fission and fusion. The most powerful nuclear weapon ever created by mankind thus far was a hydrogen bomb called “Tsar Bomba” (meaning “the Emperor of Bombs”), which was detonated by the Soviet Union on the island of Novaya Zemlya in the Arctic Circle on October 30, 1961. Its explosive yield was 50 megatons, which is 3,800 times that of the atomic bomb detonated over Hiroshima.

Rather than promoting a Cold War era-like increase in the power and numbers of nuclear weapons, current technological advances have focused on miniaturizing nuclear warheads, multiplying the number of warheads that can be loaded in a single missile, and increasing the accuracy of missiles. It is an unfortunate reality in the world today that the nuclear powers continue to possess long-term programs for the modernization and capacity-building of their nuclear arsenals.

Q3. North Korea’s nuclear weapons: How advanced are they?

The Democratic People’s Republic of Korea (DPRK; North Korea) has continued to develop its nuclear weapons program. In 2006, the DPRK conducted its first underground nuclear explosive test, following the declaration of its withdrawal from the Nuclear Non-Proliferation Treaty (NPT) in January 2003. In spite of repeated calls from the international community for it to terminate nuclear testing, the DPRK has conducted nuclear tests an additional four times—in 2009, 2013, and 2016 (January and September). Moreover, the DPRK is pouring effort into developing nuclear-capable missiles, and repeatedly conducts various missile test launches.

Actually, the overall picture of the DPRK’s nuclear program is unclear. Although on our poster we estimate the number of nuclear warheads possessed by the DPRK to be less than 20, there is no agreed estimation among researchers and research institutes, and no one knows

the exact figures. Nevertheless, it is almost certain that the nuclear technology of the DPRK has advanced steadily, and many experts are raising serious concerns that the DPRK has already succeeded in miniaturizing its nuclear warheads so that they can be fit onto their missiles.

The conflict between the DPRK and its neighboring countries has been aggravated. The United States is becoming more aggressive, warning that it would not exclude military options against the DPRK if necessary. Likewise, Japan and South Korea are increasing military pressure on the DPRK. Such attitudes have caused rising tension in the region while hardening the DPRK’s attitude.

Q4. Will the adopted nuclear weapons ban treaty eliminate nuclear weapons?

On July 7, 2017, the Treaty on the Prohibition of Nuclear Weapons was adopted. This is the first international law to categorically outlaw all nuclear weapons. Based on international humanitarian law, this ground-breaking treaty prohibits signatories from developing, testing, possessing, using, or threatening to use nuclear weapons, as well as assisting or encouraging anyone to engage in any activity prohibited under the treaty. Recognizing the unacceptable suffering of victims, including the *hibakusha* of Hiroshima and Nagasaki and those affected by the testing of nuclear weapons, the treaty articulates the positive obligation of signatories to adequately provide assistance to these victims. The efforts of civil society—including the *hibakusha* of Hiroshima and Nagasaki, as well as many like-minded countries that have acted in concert with civil society movements— to raise awareness of the inhumanity of nuclear weapons have finally borne fruit.

Of course, the adoption of a ban treaty does not automatically mean that we will soon achieve the goal of abolishing nuclear weapons. Countries with nuclear weapons and those under the “nuclear umbrella” have been taking a negative stance toward the treaty and are unlikely to join it, at least for the time being. However, the adoption of this treaty, which clearly brands nuclear weapons as illegal, will help to stigmatize such weapons. Nuclear weapons are now not only immoral, but also illegal—this fact can exert further pressure on those countries relying on nuclear deterrence to review their policies.

