



Source: BBC

NUCLEAR PROLIFERATION

POSSIBLE ESSENTIAL QUESTIONS

- How might we balance tensions between national sovereignty and global security?
- To what extent are perspectives about nuclear disarmament from different nuclear states similar and different? What diverse perspectives exist within each nuclear state?
- How might a nuclear attack hinder the world's progress on the UN Sustainable Development Goals?
- In what ways might the examples of the nuclear programs of Libya and Iraq make North Korea unlikely to give up its newly acquired nuclear weapons?
- How might the global community use bans on the use of landmines and chemical weapons to increase pressure on nuclear states to eliminate their nuclear weapons?
- To what extent do nuclear weapons make a country more secure? In contrast, in what ways does the existence or use of nuclear weapons make people and countries insecure? In what ways do peace and security feel similar? In what ways do peace and security differ?

The [Sustainable Development Goals](#)

SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

SDG 3: Ensure healthy lives and promote well-being for all at all ages

SDG 5: Achieve gender equality and empower all women and girls

SDG 6: Ensure availability and sustainable management of water and sanitation for all

SDG 10: Reduce inequality within and among countries

SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

SDG 13: Take urgent action to combat climate change and its impacts

SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

SDG 15: Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

BACKGROUND

The vast majority of countries on Earth support a nuclear-weapons-free world. Nine countries, however, have nuclear weapons. The United States and Russia hold about 91% of all the world's nuclear weapons. Nuclear bombs have only been used in conflicts twice, both by the United States when it bombed the Japanese cities of Hiroshima and Nagasaki in August 1945 during World War II, killing about half of the people in each city. With bombs massively more powerful than the ones with which the US attacked Japan, the United States has since tested more nuclear weapons than the rest of the world put together.

The Non-Proliferation Treaty (NPT) is a key international security agreement, which entered into force in 1970. At the time, five countries had developed nuclear weapons (US, Soviet Union, France, Great Britain, China). By signing the NPT these nuclear states promised to eliminate their own nuclear weapons, to share peaceful nuclear technology with other countries, and to adopt "effective measures in the direction of nuclear disarmament." Non-nuclear states who signed the NPT pledged to never develop nuclear weapons, though four states that are not signatories of the NPT have developed them (India, Israel, Pakistan, North Korea). Since the NPT doesn't have a binding timeline, there is no deadline by which nuclear powers must eliminate their nuclear weapons. One of the ways that nuclear states can show that they have adopted "effective

measures in the direction of nuclear disarmament” is to sign and ratify the Comprehensive Test Ban Treaty (CTBT), which bans all nuclear weapons tests. Republican senators have blocked the United States from ratifying the CTBT, which in turn has blocked the treaty from being enacted worldwide despite 168 countries having ratified the treaty including Russia, Great Britain, and France.

Since the NPT was ratified in 1970, the total number of worldwide nuclear weapons has dropped from almost 60,000 during the Cold War to about 13,000. Through treaty agreements parts of the world have declared themselves nuclear-weapon-free zones (NWFZ), including the whole Southern Hemisphere, parts of the Northern Hemisphere, the ocean floor, Antarctica, and Outer Space; this means these regions will not build, receive, test, or store nuclear weapons. Five countries host U.S. nuclear weapons on their land (Belgium, Turkey, Germany, Netherlands, and Italy). And [27 countries](#) endorse nuclear weapons. Some countries have signed security guarantees called [nuclear umbrellas](#), which are promises to militarily protect an ally if they are attacked. The United States, for example, has vowed to protect Japan, Australia, South Korea, and all members of North Atlantic Treaty Organization (NATO) that do not have nuclear weapons. Some countries have developed nuclear weapons and then given them up, for example South Africa and countries formerly occupied by the Soviet Union like Ukraine, Belarus, and Kazakhstan. Other countries have made significant progress toward developing nuclear weapons and then halted their nuclear programs, for example Brazil, Argentina, Libya, and Iraq. In 1996, the International Court of Justice ruled that the threat or use of nuclear weapons is against international law though it did not conclude if the use of nuclear weapons would be lawful or unlawful in the case of “extreme circumstances of self-defense, in which the very survival of a state would be at stake.”

In 2000 the Nuclear Weapon States agreed to “total elimination of their nuclear arsenals,” but committed to no deadline for when they would get rid of all nuclear weapons. The tension regarding whether to destroy nuclear weapons is a classic example of whether countries achieve security through peace or peace through security. Some believe that using nuclear weapons would cause mutually assured destruction (MAD); the nuclear weapons act as a deterrent (i.e., disincentive or discouragement for doing something) for countries to engage in

war with one another. Others argue that even holding nuclear weapons is illegitimate and that intentional attacks by nuclear states are not the only threat. Nuclear accidents, attacks based on misinformation or mistakes, or nuclear weapons falling into the hands of non-state actors (e.g., terrorist organizations) all pose threats to nuclear states and the rest of the world alike. Since nuclear threats transcend national borders, the whole world is vulnerable, sparking fierce debate over whether holding nuclear weapons is an act of national sovereignty or whether the whole world has a legitimate right to demand abolishment of nuclear weapons.

The International Campaign to Abolish Nuclear Weapons ([ICAN](#)) received the 2017 Nobel Peace Prize in recognition of its work “to draw attention to the catastrophic humanitarian consequences of any use of nuclear weapons” and its “ground-breaking efforts to achieve a treaty-based prohibition of such weapons.” The [Treaty on the Prohibition of Nuclear Weapons](#) entered into force in 2021 and provides a legally binding instrument to prohibit nuclear weapons, increasing the illegitimate nature of the nine nuclear states, much like using chemical weapons and landmines is now seen as illegitimate by most states. ICAN seeks to put pressure on nuclear powers to eliminate their weapons by stigmatizing and delegitimizing countries that fail to eliminate their nuclear weapons.

Besides holding nuclear states accountable for eliminating their nuclear weapons, the world faces numerous ongoing conflicts regarding nuclear programs including [North Korea’s](#) recent acquisition and testing of nuclear weapons; Iran’s fledgling nuclear program and former U.S. President Trump’s withdrawal of the United States from the 2015 Joint Comprehensive Plan of Action ([JCPOA](#)) that limited the likelihood of Iran developing viable nuclear weapons; Russia’s invasion of Ukraine, recent threats to use nuclear weapons, and [utter disregard for the world order](#) that has shaped international relations since World War II; and the [U.S.’s commitment of up to \\$2 trillion](#) over the next 30 years to sustain and modernize its nuclear arsenal. As the world attempts to minimize the impacts of climate change, many countries see [nuclear energy](#) as vital to their future national energy strategies, potentially increasing widespread reliance on uranium and nuclear fission to reduce their use of fossil fuels like oil, natural gas, and coal.



RESOURCES
Personal Stories

- [Poetry for Peace Stories from Atomic Bomb Survivors](#) - *United Nations*
- [75th Anniversary of Hiroshima & Nagasaki Bombings - Survivors' Stories](#) - *ICAN (International Campaign to Abolish Nuclear Weapons)*
- [We Honor Them with Action](#) - *ICAN*
- [The Atomic Soldiers](#) - *NYT*
- [Nine Eyewitness Accounts of the Bombings of Hiroshima and Nagasaki](#) - *Smithsonian*
- [Oral Histories](#) - *Voices of the Manhattan Project*
- [Yoshito Matsushige's Account of the Hiroshima Bombing](#) - *Atomic Heritage Foundation*
- [Survivor Voices](#) - *ICAN*
- [Nevada Test Site Oral History Project](#) - *UNLV*
- [Downwinders of Utah Archive](#) - *University of Utah*
- [Marshall Islands](#) - *Atomic Heritage Foundation*
- [US Strategic Nuclear Policy- An Oral History](#) - *Sandia National Labs*
- [Marshall's Nuclear Legacy: Country's Oral History at Risk](#) - *Radio New Zealand*
- [Disarmament Sketches: Three Decades of Arms Control and International Law](#) - *Thomas Graham (book)*

Articles

- [Treaty on the Non-Proliferation of Nuclear Weapons \(TPNW\)](#) - *United Nations*
- [How the Treaty on the Non-Proliferation of Nuclear Weapons Works](#) - *ICAN*
- [Nobel Peace Prize Goes to Group Opposing Nuclear Weapons](#) - *NYT*
- [Avoiding Armageddon: The Laws of Disarmament and Nonproliferation](#) - *PBS*
- [Avoiding the Tipping Point](#) - *Arms Control Association*
- [A Treaty is Reached to Ban Nuclear Arms. Now Comes the Hard Part](#) - *New York Times (NYT)*
- [The Real Reason a North Korean Nuclear Weapon is So Terrifying – and It's Not What You Think](#) - *Brookings Institution*
- [Disarmament and Nonproliferation Education](#) - *United Nations*
- [Cyber Doctrines and the Risk of Nuclear Crisis Instability](#) - *CFR*

- [Emerging Technologies and Nuclear Weapon Risks](#) - *ICAN*
- [We Need to Talk about Nuclear Weapons Again](#) - *Foreign Policy*
- [How to Think about the Risk of Nuclear War, According to 3 Experts](#) - *Vox*
- [Reassessing Europe's Nuclear Order: Perspectives for a Nuclear Weapons Free Zone](#) - *Arms Control Negotiation Academy*
- [NATO's Nuclear Deterrence Policy and Forces](#) - *NATO*
- [Chinese Views of the Changing Nuclear Balance](#) - *Texas National Security Review*
- [Written Statement by the Chinese Delegation at the Thematic Discussion on Nuclear Weapons](#) - *Permanent Mission of the People's Republic of China to the UN*
- [The New Nuclear Age - How China's Growing Nuclear Arsenal Threatens Deterrence](#) - *Foreign Affairs*
- [Nuclear Power Could Help Europe Cut Its Russia Ties, but Not for Years](#) - *NYT*
- [Racism and Nuclear Weapons](#) - *ICAN*
- [Gender and Nuclear Weapons](#) - *ICAN*
- [Let's Be Realists: 11 Answers to Common Comments and Questions about Nuclear Weapons](#) - *ICAN*
- [Pocket Guides to the Legal Gap; Nuclear Arsenals; Humanitarian Impacts and Risks; Working with Parliamentarians; Media and Messaging; Common Misconceptions; Mobilizing Key Constituencies](#) - *ICAN*
- [International and National Nonproliferation Campaigners' Kit](#) - *ICAN*
- [The Demise of Arms Control Extends Far Beyond Nuclear Weapons](#) - *Just Security NYU*
- [The Spread of Nuclear Weapons: More May Be Better](#) - *Kenneth Waltz*
- [Beyond Waltz's Nuclear World](#) - *Ken Booth*
- [Nuclear Weapons](#) - *Union of Concerned Scientists*
- [Articles on nuclear nonproliferation](#) - *Council on Foreign Relations (CFR)*
- [Curricula available for purchase](#) - *Brown University*
- [Nuclear Weapons: An Intolerable Threat to Humanity](#) - *International Red Cross*

Data & Maps

- [Nuclear Weapons](#) - *Our World in Data*
- [Why Reducing Risk of Nuclear War Should Be Key Concern of Our Generation](#) - *Our World in Data*
- [Map: All 17,000 of the World's Nukes](#) - *Business Insider*
- [Time-Lapse Map Video of Every Nuclear Explosion Since 1945](#) - *Isao Hashimoto*
- [The US Nuclear Arsenal](#) - *Union of Concerned Scientists*
- [Status of World's Nuclear Forces](#) - *Federation of American Scientists*
- [Russia's Nuclear Weapons: Doctrine, Forces, and Modernization](#) - *Congressional Research Service*
- [Treaty on the Prohibition of Nuclear Weapons](#) - *European Union*
- [Nuclear Weapons](#) - *World Mapper*
- [Nuclear-Weapon-Free Zones](#) - *UN*

Literature


- [Nuclear Proliferation Reading List](#) - CFR
- A Graphic History of the First Atomic Bomb - *Jonathan Fetter-Vorm (book)*
- Hiroshima - *John Hersey (book)*
- The Making of the Atomic Bomb - *Richard Rhodes (book)*
- The Bomb: A New History - *Stephen Younger (book)*
- [Proliferation: The Case of North Korea](#) - *Donald Snow*

Art/Images

- [Disarmament Infographics](#) - *United Nations*
- [Art for Peace](#) - *United Nations*
- [Disarmament Poster Contest](#) - *United Nations*
- [Editable Social Media Graphics on Nuclear Nonproliferation](#) - *ICAN*
- [What Happens in a Bomb Blast?](#) - *Outrider*
- [Peace Poetry Contest](#) - *Nuclear Age Peace Foundation*
- [Matters of Empathy and Nuclear Colonialism: Marshallese Voices Marked in Story, Song, and Illustration](#) - *University of Michigan*

Podcasts

- [The Future of Arms Control](#) - *CFR and Rose Gottemoeller*
- [The Politics of Proliferation](#) - *CFR and Matthew Fuhrmann*
- [Disarmament Today](#) - *United Nations*
- [Nukes](#) - *RadioLab*
- [Nukes of Hazard](#) - *Center for Arms Control and Nonproliferation*
- [PONI Pathbreakers: The Nuclear Nonproliferation Regime](#) - *Center for Strategic and International Studies*
- [Sarah Bidgood - Nuclear Nonproliferation Expert](#) - *The Adventure Stache*
- [Arms Control Wonk](#) - *Jeffrey Lewis*
- [Nuclear Explained](#) - *International Atomic Energy Agency*
- [Risks of Nuclear War and the Escalation Ladder](#) - *Hidden Forces and Jon Wolfsthal*
- [Do Nuclear Weapons Keep Us Safe? An Arms Control Expert Weighs In](#) - *G Zero World*
- [Partnering for Nuclear Nonproliferation](#) - *Engineering Out Loud and Sara Pozzi*

- [Disarmament Explainer Videos](#) - *United Nations*
- [Why Are Some Countries Allowed to Have Nuclear Weapons and Others Not?](#) - *Brown University*
- [What are the Dangers of Nuclear Weapons?](#) - *Brown University*
- [Why are Nuclear Disarmament and Non-Proliferation Important?](#) - *Brown University*
- [What is At Stake in the Negotiations Over Iran's Nuclear Program?](#) - *Brown University*
- [Nuclear Nonproliferation: Disarming Gender Disparities](#) - *CFR*
- [Five Movies Worth Watching About the Threat of Nuclear War](#) - *CFR*
- [Nuclear Deterrence](#) - *Allen Sens UBC*
- [Uranium: Twisting the Dragon's Tail](#) - *PBS*
- [Why You Should Care about Nukes](#) - *Minute Physics*
- [The US Navy's Toxic Playground: Vieques, Puerto Rico](#) - *AJ+*
- [Radio Bikini](#) - *Robert Stone documentary*

Websites

- [North Korean Nuclear Threat role play simulation](#) (National Security Council) - *CFR Model Diplomacy*
- [North Korean Nuclear Threat role play simulation](#) (United Nations Security Council) - *CFR Model Diplomacy*
- [International Nuclear Crisis: Non-Proliferation and National Security](#) - *US National Museum of American Diplomacy*
- [Disarmament Education](#) - *United Nations*
- [See How Much You Know About Nuclear Arms Control and Nonproliferation](#) - *CFR Quiz*
- [International Campaign to Abolish Nuclear Weapons](#) - *ICAN*
- [World 101: The Nuclear World](#) - *CFR*
- [The Risk of Nuclear Weapons](#) - *Future of Life Institute*
- [International Atomic Energy Agency](#)
- [Nonproliferation Policy Education Center](#)
- [National Nuclear Security Administration](#)
- [World Nuclear Association](#)
- [Comprehensive Nuclear-Test-Ban Treaty Organization](#)
- [Nuclear Age Peace Foundation](#)
- [The Presidency in the Nuclear Age Resources](#) - *JFK Presidential Library*
- [Office for Disarmament Affairs](#) - *United Nations*
- [EU Non-Proliferation and Disarmament Consortium](#) - *EU*

Videos