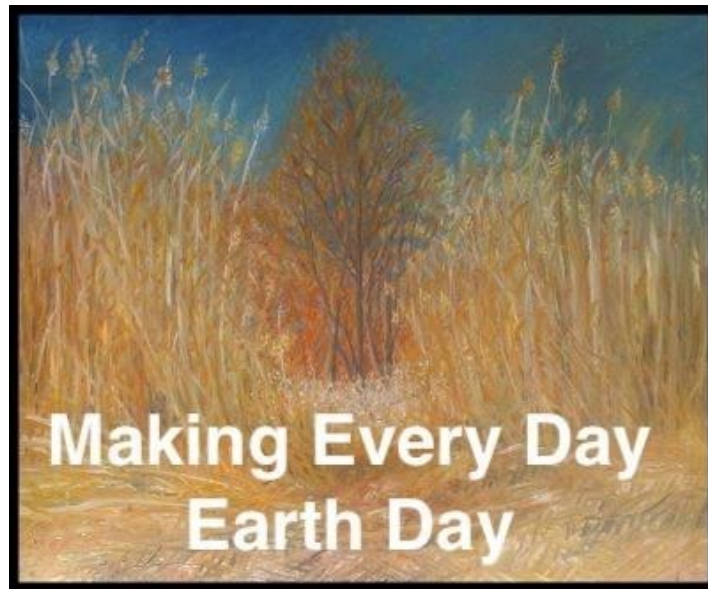


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 February 2, 2021

Militarism and Nuclear Weapons



BREAKING NEWS

On Feb. 2, 2021, the U.S. and Russia sign agreement to continue the New Start Treaty for five more years!

Last August marked 75 years since the abhorrent atomic bombings of Hiroshima and Nagasaki. To honor the victims and survivors, we invite you to envision yourselves together with us at the [Peace Pole](#) on the grounds of the Iowa state capitol and observe a moment of silence.

Our current global crisis with COVID-19, on top of the existential threats already posed by climate change and nuclear oblivion, is the ultimate wake-up call for our species. It is time to deconstruct the malignant systems that led us to this point and build ones that enable our healthy and sustainable coexistence.

In our recent edition about [militarism, ecology, and health](#), we discussed the current scale and impacts of imperialism. The U.S. military-industrial complex and its allies, along with their geopolitical foes, continue to rely on nuclear arsenals for deterrence and projection of power. As the proliferation of nuclear arms continues, and the dangers posed by them only rise over time.

Yet public awareness of these threats and action for nuclear disarmament has plummeted since the end of the Cold War. In spite of this, the *Hibakusha* (survivors of the atomic bombs dropped on Japan), along with other activists, civil society organizations, scientists, and government forces, have continued to advance toward global nuclear weapons abolition.

In this edition, we look at various nuclear threats in the context of the geopolitical conflict in the world today. We also focus on some of the environmental and health impacts of nuclear weapons manufacturing, storage, and use. This is followed by information on relevant

international treaties and discussion on how we can build upon the achievements of movements and legal frameworks to eliminate nuclear weapons.

The Shifting Nature of the Nuclear Threat

The nature of military conflict has changed significantly since the height of the Cold War when the world was gripped by the threat of nuclear war between the U.S. and USSR. The fall of the Soviet Union saw the U.S. emerge as a global hegemon. Over time, the progress of the U.S-Soviet Strategic Arms Reduction Treaty (START I) led to a diminishing of fear and day-to-day awareness of nuclear weapons for most people. Then 9/11 happened, and a new fear “emerged”: terrorism!

Focus pivoted to confronting non-state actors or highly mobile terrorists acting within cells, like Al-Qaeda or ISIS reportedly radicalizing susceptible youths, or as lone-wolves with improvised dirty-bombs. These non-state actors claimed no national identity precluding any justifiable target upon which to threaten a nuclear attack. Thus, concern about nuclear weapons faded.

Over time, nuclear weapons inventories have been [substantially reduced](#) — from 70,300 in 1986 to less than 14,000 today. The largest part of this reduction occurred in the 1990s. While tensions between the U.S. and Russia remain strained, there are still enough nuclear weapons deployed across the world to wipe out global civilization many times over. With climate change and shifting socio-political forces both likely to exacerbate conflict in the near-to-midterm, there is no guarantee that the threat of nuclear war will remain distant. We cannot afford to take this very real threat incrementally any longer.

This is especially true when one considers the recent development of smaller, tactical nukes [by the U.S](#) Each one is comparable in strength to those that were dropped on Japan and are designed not to deter but to actually be used in combat situations. Ordered by Trump following his suspension of the Intermediate-Range Nuclear Forces (INF) treaty, deployment of these weapons is already underway. The fear is that the use of such weapons would risk escalating any conflict to the level of global nuclear conflict. While that may seem distant given the last few decades of ‘hegemon vs terrorist,’ we are entering a multipolar world where conflict between major nation-states may take center stage once more.

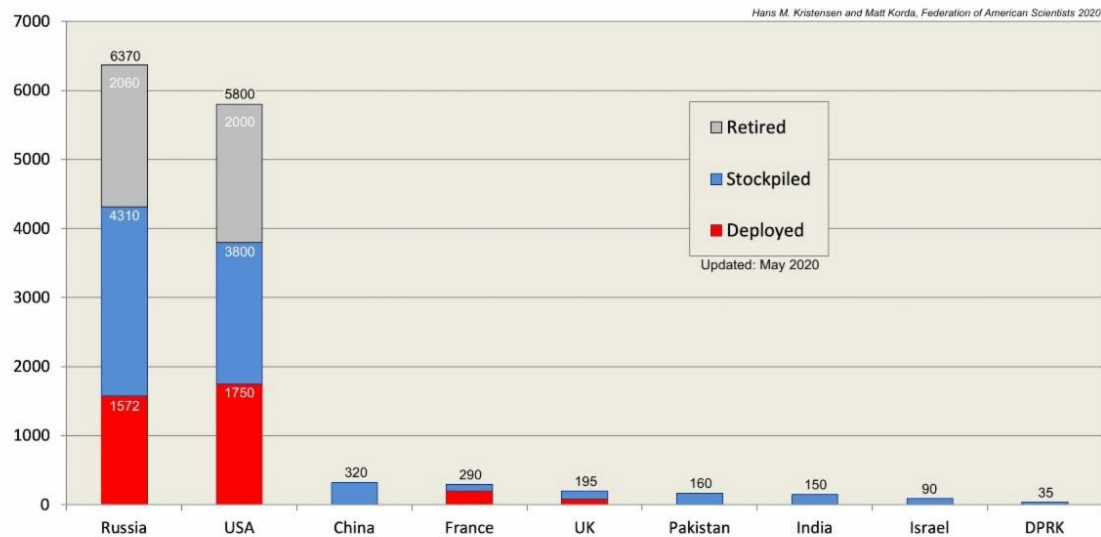
"The Greatest Threat: Preventing Nuclear Terrorism"

—Carnegie Corporation of New York (2016)



Nuclear-armed states apparently plan to retain large arsenals for the [indefinite future](#), including new weapons designed to expand the role they play in their national strategies. Together, Russia and the U.S. hold around 90% of all nuclear weapons that are either deployed or stockpiled. China, France, and the UK account for much of the rest, but Israel, India, and Pakistan still possess enough to cause grave *global* harm should they be used in a regional exchange. These are among the considerations of the leading scientists who recently judged the planet to be a symbolic 100 seconds to midnight on the Doomsday Clock—for the second year in a row.

Estimated Global Nuclear Warhead Inventories, 2020



Ecological and Health Consequences of Nuclear Weapons

The production, use, and waste storage of nuclear weapons all release ionizing radiation. In addition to the victims and survivors of Hiroshima and Nagasaki, workers, veterans, and civilians living near nuclear weapons sites have been exposed to this radiation and suffer acute and long-term illnesses, which are often lethal and have intergenerational health effects. Examples include:

- Leukemia
- Multiple myeloma
- Stomach, colon, lung, breast, and thyroid cancers
- Cataracts
- Birth defects
- Infertility
- Chromosomal aberrations
- Hemorrhaging
- Infections

Around the world, nuclear weapons facilities have contaminated land and water with [radioactive waste](#) lasting at least 100,000 years. For generations, communities have sought environmental restorative justice for lands and peoples impacted by radioactive contamination, with very limited success. Clean up efforts have cost billions of dollars over decades and are still largely unfinished. There is not enough pressure on polluting nations to pay for damages, even those mandated by international tribunals.

Radioactive Fallout From Nuclear Weapons Testing

"Detonating nuclear weapons above ground sends radioactive materials as high as 50 miles into the atmosphere. Large particles fall to the ground near the explosion-site, but lighter particles and gases travel into the upper atmosphere. The particles that are swept up into the atmosphere and fall back down to Earth are called fallout. [Fallout can circulate around the world for years](#) until it gradually falls down to Earth or is brought back to the surface by precipitation. The path of the fallout depends on wind and weather patterns."

The atomic bombs that the United States dropped on Hiroshima and Nagasaki are estimated to have led to around 250,000 deaths, including around 145,000 killed immediately by the blasts. Of the rest, radiation sickness led to thousands dying in the months after the events, prolonging the collective trauma in hitherto unimaginable ways.

It does not take thousands of bombs exploding across the globe for nuclear weapons to pose an existential threat to humanity. A PSR study into the humanitarian impact of 300 Russian nuclear weapons launched against U.S. cities found that 75 to 100 million people would die within 30 minutes of impact. Still, these numbers would soon be dwarfed by the impact such an attack would have at a global scale. Scientific modeling from [Princeton University](#) demonstrates that a limited nuclear exchange, even confined to a regional scale, would dramatically disrupt the world's climate and have long-term impacts on worldwide agricultural production. The resulting global famine would leave 1 billion people at risk of starvation, and a further 1.2 billion would be highly food insecure.

Research by International Physicians for the Prevention of Nuclear War (IPPNW) and PSR concludes that up to [two billion people](#) would be at risk of starvation following a nuclear conflict consisting of only 100 Hiroshima-sized nuclear warheads going off over 100 cities. The firestorms would loft about 5 million tons of soot into the upper atmosphere, blocking out the sun, cooling and drying the planet, shortening the growing season, and severely disrupting food production.

The death of 2 billion people would not be the extinction of our species, but it would be the end of civilization as we know it.

No one has wanted to talk about what happens if the weapons are actually used, because the only conclusion you can draw, if you look at the data, is that these weapons are too dangerous to exist.

— Dr. Ira Helfand, from the documentary film, "The Beginning of the End of Nuclear Weapons" (2019)



Treaties

When the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) entered into force in March 1970, it committed the signatories to pursue complete nuclear disarmament, including the five Nuclear Weapon States (NWS) of the US, UK, France, USSR, and China. The treaty also prohibits the remaining Non-Nuclear Weapons States (NNWP) from developing nuclear weapons but expressly acknowledges the right of all nations to pursue peaceful nuclear power for energy production.

All nation-states ratified the NPT except India, Pakistan, and Israel, who developed their own nuclear weapons. The NPT can be viewed as a success as only one signatory, North Korea, left the agreement to develop nuclear weapons. However, the commitment of the five NWS to pursue disarmament has to be considered a failure. Rapid escalations of the Cold War soon necessitated new treaties that met with varying degrees of success.

The last three years, in particular, have been an important time for nuclear weapons agreements and treaties. The Intermediate-Range Nuclear Forces Treaty and the Treaty on Open Skies collapsed after the Trump administration pulled the U.S. out of both agreements. While Biden is on record as being critical of those decisions, they are likely to be low on the list of priorities for this new administration among the many current crises. Other important developments include the status of the following treaties.

Joint Comprehensive Plan of Action (JCPOA)—a.k.a The Iran Nuclear Deal:

The Trump administration pulled out of [the deal](#) arranged between Iran and several world powers in 2018, unraveling three years of progress and many more years of planning. U.S. and Israeli attacks on Iran's nuclear sector and the re-imposition of sanctions has predictably led to Iran disregarding the deal, though inspections are still being agreed to. In a hopeful sign that resurrecting the JCPOA is part of the new administration's plans, President Biden has brought in key Obama appointees involved in the 2015 deal. Whether Iran can be persuaded to rejoin is another question.

The New START Treaty:

The New START treaty between the U.S. and Russia was ratified in 2011, replacing the START I treaty, which expired in 2009. New START committed both parties to limit the number of deployed strategic warheads to 1550, deployed missiles and bombers to 700 and deployed and non-deployed launchers to 800. According to the Bureau of Arms Control, Verification and Compliance, [as of October 2020, these goals were met](#) by both the U.S. and Russia.

With New START due to expire on February 5, 2021, the U.S. House of Representatives agreed on January 21st to a resolution (H.Res.54) which, "calls on the President to extend the New START Treaty for five years without further delay to give the United States, in consultation with allies, the time and space needed to pursue a broader, more comprehensive arms control agenda with Russia and China that addresses all types of nuclear weapons and emerging technologies that can affect strategic stability." This extension was agreed to by Biden and Putin on January 26th. *[BREAKING NEWS: on Feb. 2, 2021, the U.S. and Russia sign agreement to continue the New Start Treaty for five more years!]*

Treaty on the Prohibition of Nuclear Weapons (TPNW):

The TPNW is the legal avenue non-nuclear-weapon states took when nuclear-armed countries failed to fulfill their obligations under the Non-Proliferation Treaty. Although only States parties are legally bound to it, this nuclear weapon ban is designed to increase pressure on nuclear-armed nations to fall in line. Unfortunately, nuclear states refused to attend the meetings that shaped the treaty and pressured other countries not to sign-on, or withdraw their support. Regardless, the international community declared nuclear weapons illegal when the TPNW entered into force on January 22nd this year.

This treaty prohibits States parties from developing, testing, producing, manufacturing, acquiring, possessing, or stockpiling nuclear weapons or other nuclear explosive devices. Furthermore, signatories are barred from transferring or receiving nuclear weapons and other nuclear explosive devices, controlling such weapons, or assisting with any activities prohibited under the treaty. States are also prohibited from using or threatening to use nuclear weapons and other nuclear explosive devices. Lastly, States parties cannot allow the stationing, installation, or deployment of nuclear weapons and other nuclear explosive devices in their territory.

The [text of the TPNW](#) contains more unprecedented elements. For example, it recognizes the 'unacceptable suffering of and harm caused to victims of nuclear weapons use and testing and their disproportionate impacts on indigenous peoples, women, and girls. Additionally, the Treaty requires States parties to respond to provide victim assistance and environmental remediation through a cooperative international framework.

On December 4th, Zimbabwe became the 54th signatory to the treaty, with many more countries expected to sign. The U.S. government has to plan for the eventuality of moving our nuclear arsenals from countries that ratify the Nuclear Weapon Ban.

So long as treaties allow countries to retain the capacity to wipe out humankind as we know it, the treaties aren't doing their job. We could see a new treaty signed every ten years, committing all parties everywhere to eliminate half of their nuclear weapons, *and it would still take 70-80 years before we could even begin to consider the threat receding*. Clearly, we must all fight for the next treaty to be *the* treaty eliminating *all* nuclear weapons. It is *vital* that we make the most of *the* next four years of the Biden administration to ensure as many nuclear weapons as possible are eradicated.

Movements against Nuclear Weapons

International Campaign to Abolish Nuclear Weapons (ICAN):

In 2017, ICAN received the Nobel Peace Prize for its work leading to the adoption of the Treaty on the Prohibition of Nuclear Weapons (TPNW) in July 2017. Physicians for Social Responsibility (PSR) is a partner organization with ICAN.

[Learn more about ICAN](#)

ICAN video - ["What inspires YOU to act?"](#) (September 16, 2019)

[Resources for TPNW activists and campaigners](#)

Don't Bank on the Bomb (DBOTB):

Since 2013, the organization PAX has published the annual [Don't Bank on the Bomb](#) report as a contribution to the International Campaign to Abolish Nuclear Weapons-ICAN

Don't Bank on the Bomb is the only regularly published source of information on the private companies involved in the production of nuclear weapons and their financiers. The report examines contracts for the production of key components of nuclear weapons and their specifically designed delivery systems. It provides information on the financial institutions seeking to profit from these producing companies. The report also profiles those institutions and others that limit or prohibit any financial engagement with companies associated with the production of nuclear weapons.

Back from the Brink:

"Back from the Brink: The Call to Prevent Nuclear War," conceived in 2017 by the Union of Concerned Scientists and PSR, is a rapidly growing grassroots campaign seeking to fundamentally change U.S. nuclear weapons policy and lead us away from the dangerous path we are on. The initiative lays out [five policy solutions](#):

1. Renounce first use
2. End sole authority
3. End hair-trigger alert
4. Cancel enhanced weapons
5. Pursue Global Elimination

It has been endorsed by hundreds of health, environmental, academic, peace, and justice organizations. The campaign has resulted in resolutions being approved by the United States Conference of Mayors, as well as a number of municipalities, including the cities of Los Angeles, Washington DC, and [Des Moines](#).

Individuals and organizations, civic leaders and municipalities, counties and states, the public and private sector are all invited to join the campaign.

[Endorse](#) Back from the Brink.

[Organize](#) a Back from the Brink campaign in your community.

More Steps We Can Take

Help build awareness about nuclear weapons risks and the need for nuclear disarmament. Other opportunities to schedule events and actions are the International Day against Nuclear Tests and the International Day for the Total Elimination of Nuclear Weapons.

Contact your representatives and ask them to:

- Support the Biden administration in making every effort to implement the, now renewed, New START treaty activities as soon as possible.
 - Support No First Use Acts likely to be reintroduced in 2021 to prohibit the U.S. from launching a nuclear first strike.
 - Ratify and implement the Comprehensive Nuclear Test Ban Treaty (CTBT), which we signed in 1996.
 - Work with civil society and government officials to strengthen the Nuclear Non-Proliferation Treaty (NPT) and ensure the success of the NPT Review Conferences.
 - Urge the U.S. Administration to negotiate re-entry into the Intermediate-Range Nuclear Forces (INF) treaty.
-

Learn More

["Extending New START Should Be Just the Beginning"](#) (January 25, 2021) *Carnegie Endowment for International Peace*

["No president should have unilateral power to use nuclear weapons: Sen. Warren and Sec. Perry"](#) (January 25, 2021) *USA Today*

["The Treaty on the Prohibition of Nuclear Weapons Enters Into Force Today"](#) by Hans Kristensen (January 22, 2021) *Federation of American Scientists*

["Nine hurdles to reviving the Iran nuclear deal"](#) (January 19, 2021) *Bulletin of Atomic Scientists*

["Ground Breaking Treaty Makes Nuclear Weapons Illegal Under International Law"](#) by Sandy Jones (January 18, 2021) *Nuclear Age Peace Foundation*

["Our advice to President-elect Biden: Break the dangerous pattern of nuclear competition with Russia"](#) by Jerry Brown, William J. Perry & David Holloway (January 18, 2021) *Bulletin of Atomic Scientists*

["Moon urges Biden to learn from Trump's N. Korea diplomacy"](#) (January 18, 2021) *Associated Press*

["Why Iran's nuclear facilities are still vulnerable to attack"](#) (January 18, 2021) *BBC*

["A clean return to the Iran nuclear deal should be Biden's first option"](#) by Eric Brewer (January 11, 2021) *Bulletin of Atomic Scientists*

["Nuclear stand-off: can Joe Biden avert a new arms race?"](#) (January 11, 2021) *The Guardian*

["A Clear and Present Threat"](#) (January 7, 2021) *Physicians for Social Responsibility*

["NNSA Nuclear Plan Shows More Weapons, Increasing Costs, Less Transparency"](#) by Hans Kristensen (December 30, 2020) *Federation of American Scientists*

["Convincing Nuclear-armed Countries to Take the Path to Total Elimination of Nuclear War"](#) [blog] (December 7, 2020) *Physicians for Social Responsibility*

["Congress Eliminates Funding for Nuclear Weapons Tests"](#) (December 17, 2020) *Physicians for Social Responsibility*

["After 28 Years, Should the U.S. Resume Testing Nuclear Weapons?"](#) [blog] (November 19, 2020) *Physicians for Social Responsibility*

["The UN Nuclear Ban Treaty Enters Into Force in January: Then What?"](#) [video] (November 13, 2020) *Carnegie Endowment for International Peace*

["Why Trump's Retreat from US Allies Could Have Nuclear Consequences"](#) by Eric Brewer (October 1, 2020) *Defense One*

["Director-General of the Department of Arms Control of the Foreign Ministry Fu Cong Attends Webinar on Nuclear Disarmament of United Nations Office for Disarmament Affairs"](#) (August 28, 2020) *Ministry of Foreign Affairs of the People's Republic of China*

["Toward a More Proliferated World? The Geopolitical Forces that Will Shape the Spread of Nuclear Weapons"](#) by Eric Brewer (September 2, 2020) *Center for Strategic and International Studies*

["Time to Divest from Nuclear Weapons Industries"](#) (July 24, 2020) *Physicians for Social Responsibility*

["Surging U.S. Nuclear Weapons Budget a Growing Danger"](#) (March 19, 2020) *Arms Control Association*

[The World's Most Dangerous Nuclear Weapon Just Rolled Off the Assembly Line: With the creation of a new "mini-nuke" warhead, the US is making nuclear war all the more probable.](#) (February 12th, 2019) *The Nation*

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