

# Creating a World Without Nuclear Weapons

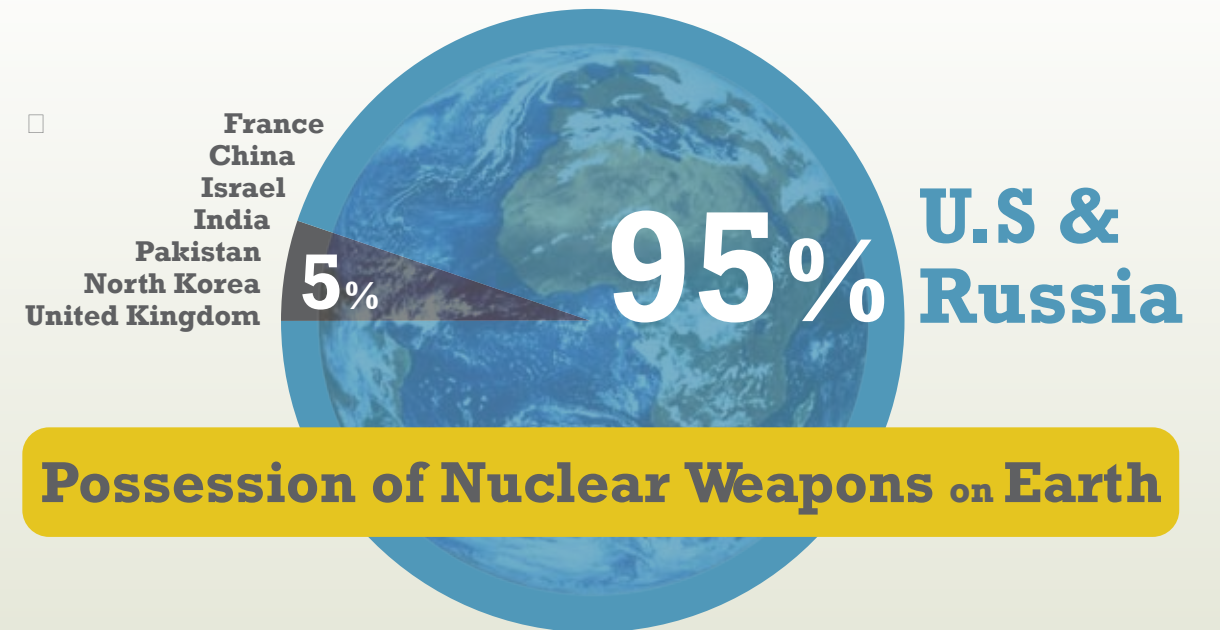
**W**e are in the seventh decade of the Nuclear Age. With the capacity to destroy civilization and end life on the planet, more than 20,000 nuclear weapons remain in the arsenals of nine nuclear weapon states.

The United States and Russia head the list of countries with nuclear weapons, which together have more than 95 percent of the total on the planet. These two countries still maintain over 1,000 nuclear weapons each on hair-trigger alert, ready to be fired within moments, raising concerns for accidental launches. The U.K., France, China, Israel, India, Pakistan and North Korea hold the remaining five percent of nuclear weapons.

Nuclear weapons endanger the future of our species and along with all other forms of life. The only safe and stable number of nuclear weapons on the planet is zero. Achieving zero will require political will, which in turn will require strong public support. It will also require an effective means to verify to prevent cheating.

by David Krieger  
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Every year, on the anniversary of the Hiroshima atomic bombing there are memorials like this one seen at the A-Bomb Dome, the site of the bombing. They serve as a remembrance of the victims of Hiroshima and Nagasaki, and a reminder of what these very powerful weapons can do.



## The Limits of Deterrence

Weapons of mass annihilation have been used throughout the Nuclear Age to threaten retaliation. But the threat of retaliation, known as deterrence, is not defense. Nuclear deterrence is meaningless when it comes to terrorist groups, which, without territory, cannot be subject to retaliation. No matter how powerful a country's nuclear arsenal, it cannot deter a determined extremist group in possession of a nuclear weapon.

For deterrence to work, the country's leaders must believe in the intent as well as the opponent's capacity to retaliate. Without that belief, such a threat may be doubted or dismissed, rendering the deterrence effort useless. Deterrence also relies upon rationality, and history proves that all political leaders do not act rationally at all times.

**The more countries that have nuclear weapons, the greater the danger that these weapons will be used by accident, miscalculation, or design.**

## Weapons of the Weak

Nuclear weapons may provide perceived security for a weaker country in relation to a stronger one. Iraq, Iran and North Korea were branded as an "axis of evil" in the early days of the Bush Administration. The U.S. then proceeded to attack Iraq on the false charge that it had a nuclear weapons program, overthrow its leadership and occupy the country. With North Korea, a country suspected of having a small arsenal of nuclear weapons, the U.S. was much more cautious and engaged in negotiations. This sent the message to Iran that they would be more secure with a nuclear arsenal, which is surely not the message that the U.S. wishes to send to the world.

Thought of as "military equalizers," nuclear weapons may make a country think twice about attacking. But this is a dangerous game of Russian roulette. And the more countries that have nuclear weapons, the greater the danger that these weapons will be used by accident, miscalculation or design.

Today's nuclear weapons, many times more powerful than those that obliterated Hiroshima and Nagasaki, have the capacity to destroy cities, countries, civilization, the human species and most life on our planet. As Mikhail Gorbachev has said, "It is my firm belief that

**TSAR BOMBA (USSR)**  
**50,000 Kilotons of TNT**  
 (50 million tons)

**Castle Bravo (USA)**  
**15,000 Kilotons of TNT**  
 (15 million tons)

**Ivy Mike (USA)**  
**10,400 Kilotons of TNT**  
 (10.4 million tons)

**Nagasaki: Fat Man**  
**20-22 Kilotons of TNT**  
 (20-22,000 tons)

**Hiroshima: Little Boy**  
**12-15 Kilotons of TNT**  
 (12-15,000 tons)

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the infinite and uncontrollable fury of nuclear weapons should never be held in the hands of any mere mortal ever again, for any reason." Nuclear weapons could cause irreversible damage to humanity and to the human future.

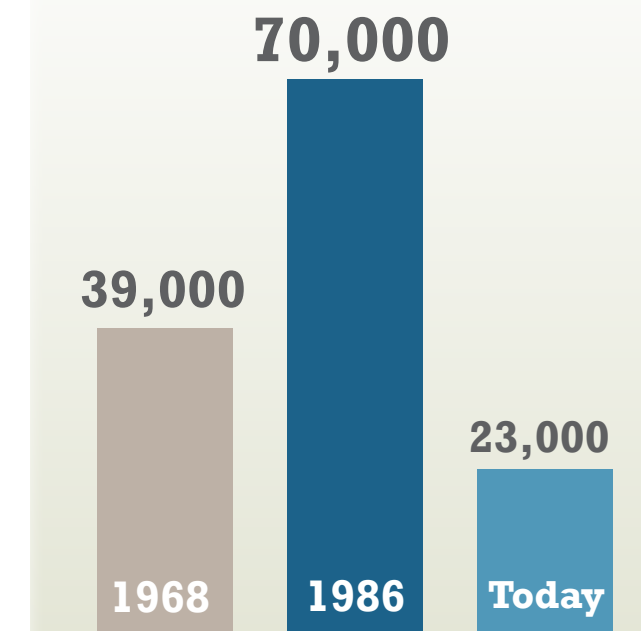
**The Nuclear Non-Proliferation Treaty**

The Nuclear Non-Proliferation Treaty (NPT) was signed in 1968 and entered into force in 1970. The NPT requires the nuclear weapon states that are parties to the treaty—the U.S., Russia (formerly Soviet Union), U.K., France and China—to engage in good faith negotiations for nuclear disarmament in return for other countries agreeing not to acquire nuclear weapons. Obviously, this agreement has not been kept. The numbers of nuclear weapons in the world grew from some 39,000 in 1968 to a high of over 70,000 in 1986, before coming down to some 23,000 today, enough to destroy civilization many times over.

Many world leaders believe that the United States has been the principal obstacle to nuclear disarmament. Under the leadership of President Obama, the United States has been playing a more constructive role and

negotiated the new Strategic Arms Reduction Treaty with Russia (New START). Under the treaty, each side, within seven years, would be barred from deploying more than 1,550 strategic warheads and more than 700 delivery vehicles. In actuality, due to counting rules and past reductions, neither side would have to eliminate large numbers of weapons to meet the new limits. But the treaty re-establishes a lapsed inspection regime and could be a foundation for deeper reductions later.

**Number of Nuclear Weapons in the World**



President Barack Obama and Russian President Dmitry Medvedev sign the New START Treaty during a ceremony at Prague Castle in Prague, Czech Republic, April 8, 2010.



**Nuclear weapons are immoral weapons...They are the enemy of humanity and the future, and we must rise up and make our voices heard for the total elimination of these weapons.**

The new strategy found in the 2010 U.S. Nuclear Posture Review renounces the development of any new nuclear weapons, overruling the initial position of the administration's defense secretary. The United States also commits to not use nuclear weapons against non-nuclear states that are in compliance with the Nuclear Non-Proliferation Treaty.

even to terrorists, increase dramatically. In addition, there is still no good answer to the problem of nuclear waste, which will remain dangerous to human health and the environment for many times longer than human civilization has existed.

**Changing Our Thinking**

We need to shift our thinking if we are to confront the serious dangers to the human future posed by nuclear weapons. As Albert Einstein warned early in the Nuclear Age, "The unleashed power of the atom has changed everything save our modes of thinking and thus we drift toward unparalleled catastrophe." The needed changes in thinking will require a major shift in our orientation toward nuclear weapons, in our willingness to imagine possible alternative futures, and in our empathy for others.

Although it's not a pledge to zero, it is a step in the right direction. However, the Nuclear Non-Proliferation Treaty refers to the peaceful uses of nuclear energy as an "inalienable right." This moves the world in the wrong direction in terms of nuclear proliferation and nuclear waste. Nuclear energy provides a pretext for the creation of fissile materials for nuclear weapons through uranium enrichment and plutonium separation technologies. Once commerce is established in such bomb materials, the prospects of nuclear proliferation,

Forty-seven heads of state gathered for the Nuclear Security Summit to discuss a plan for locking down nuclear materials.



Nuclear weapons are immoral weapons; they are not just another, albeit more powerful, weapon of war. They are the enemy of humanity and the future, and we must rise up and make our voices heard for the total elimination of these weapons. Countries with nuclear weapons must stop basing their security on the threat to annihilate millions of innocent people.

**The Need for Greater U.S. Leadership**

The United States, as the world's most powerful country, must lead in achieving a world free of nuclear weapons. Two distinguished former U.S. diplomats and arms control negotiators, Ambassador Thomas Graham Jr. and Ambassador Max Kampelman, have called U.S. leadership essential: "The road from the world of today, with thousands of nuclear weapons in national arsenals to a world free of this threat, will not be an easy one to take, but it is clear that U.S. leadership is essential to the journey and there is growing worldwide support for that civilized call to zero."

Some progress was made in the New START agreement between the U.S. and Russia and both countries are setting a new precedent. President Obama also convened a Nuclear Security Summit with 47 heads of state. "Our expectation is not that there's just some vague, gauzy statement about us not wanting to see loose nuclear materials," President Obama said. "We anticipate a communiqué that spells out very clearly, here's how we're going to achieve locking down all the nuclear materials over the next four years."

To get to zero nuclear weapons, the leaders of the world's nations, particularly the leaders of nuclear weapon states, need to agree upon the phased elimination of



On 60th anniversary of the atomic bombing of Hiroshima, Greenpeace volunteers fly Peace Doves beside the A-Bomb Dome Memorial in Hiroshima.

**To get to zero nuclear weapons, the leaders of nuclear weapons states need to agree upon the phased elimination of all nuclear weapons, with provisions for effective verification & enforcement.**

all nuclear weapons, with provisions for effective verification and enforcement.

Each generation has a responsibility to pass the world on intact to the next generation. Those of us alive today are challenged as never before to accomplish this. Technological achievement does not necessarily make us stronger. It may simply make us more vulnerable, and our old ways of thinking may seal our fate. The alternative to waiting for a nuclear catastrophe to occur is to join with others who are committed to assuring a human future, and act to rid the world of this most menacing of all human inventions. It is the power of ordinary people working in concert that has the potential to move political leaders to effective action. It is this power that must be mobilized on behalf of ridding the world of nuclear weapons.

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Biography for David Krieger and information about the Nuclear Age Peace Foundation Biography for David Krieger and information about the Nuclear Age Peace Foundation Biography for David Krieger and information about the Nuclear Age Peace Foundation Biography for David Krieger and information about the Nuclear Age Peace Foundation

