Nuclear Weapons Without Limits?

Avoiding a New Arms Race After New START

HIGHLIGHTS

Once the New START Treaty between the United States and Russia expires in February 2026, there will be no limits on the number of strategic nuclear weapons the two nations can deploy—a situation the world has not faced since 1972. To avoid a destructive and dangerous nuclear arms race, both countries should agree to honor the limitations that New START placed on their arsenals while a follow-on agreement is negotiated, a process that could take months or even years. Without such mutual constraints, the United States and Russia could field hundreds of additional nuclear weapons in a matter of weeks, and within a few years, their deployed nuclear forces could double.

Jennifer Knox

January 2026

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Union of Concerned Scientists

Introduction

Strategic arms control has shaped global security since 1972, when the United States and the Soviet Union signed the first formal agreements to limit the numbers and types of deployed strategic nuclear forces. The New Strategic Arms Reduction Treaty (New START) is the eighth such agreement between the United States and the Soviet Union or Russia (Woolf 2023). It is also the last of these agreements to remain in force—until its expiration in February 2026.

Unfortunately, no legally binding agreement has been prepared to take New START's place. Negotiating an arms control treaty, historically, has taken months, if not years, of dedicated work. In this case, the negotiating process has stalled entirely, and the United States and Russia remain far apart on what a future arms control treaty should (and could) address. Leaders in both countries need to prepare for an extended period without any formal restrictions on their respective nuclear programs, something that has not occurred since 1972.

During this period, the United States and Russia should prioritize cooperation on nuclear risk reduction outside of the framework of a formal treaty. Although the relationship between the two countries is strained, they both have strong incentives to avoid a destructive and dangerous nuclear arms race. Without mutual constraints, the two countries could field hundreds more nuclear weapons in a matter of weeks, and within a few years, their deployed nuclear forces could double. The resulting arms buildup, the lack of insight into each other's plans and arsenals, and the ending of formal bilateral consultations engendered by the treaty's verification regime would further destabilize relations between the United States and Russia, increase the risk of nuclear conflict through miscalculation or misunderstanding, and waste resources that neither country has to spare. Renewed nuclear competition between the United States and Russia could also drive China and other nuclear powers to expand their arsenals, leading to deteriorating security conditions around the world.

For years, Russia has held implementation of New START hostage and refused to talk to the US about a follow-on treaty, to pressure the US to withdraw its support for Ukraine after Russia's invasion. Russia, now seeing the dangerous situation that is approaching, has offered to extend the limits of New START for one year. This would preserve the core benefits of the treaty while creating time for a follow-on agreement to be negotiated. The Trump administration should agree to extend compliance with the limits of New START for another year and get to work on a follow-on agreement. Otherwise, the United States will be far less secure, and the world will lose decades of progress on reducing the world's two largest nuclear arsenals.

Too Important to Fail

In September 2025, President Vladimir Putin warned that it would be a "a grave and short-sighted mistake" to allow New START to expire without preserving its benefits. While he was addressing the Kremlin's Security Council, his audience was broader. In this speech, he pledged to "continue observing the treaty's central quantitative restrictions for one year . . . if the United States acts in a similar spirit and refrains from steps that would undermine or disrupt the existing balance of deterrence" (Russian Federation 2025). Russia's minister of foreign affairs, Sergey Lavrov, said, "We've repeatedly said that this proposal is our unilateral gesture of goodwill. For the U.S. to support our approach, no negotiations or consultations are necessary. . . . All that's required is for Washington to simply state that it won't increase the quantitative levels set by [New START] for one year" (*The Moscow Times* 2025).

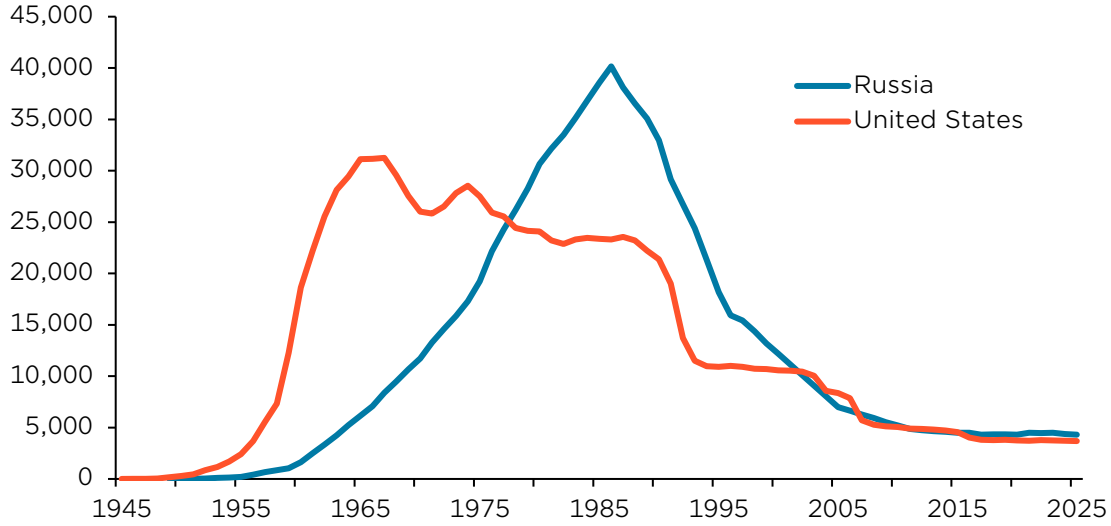
What Putin did not acknowledge is that this offer represents a serious departure from Russia's previous position on New START. In 2023, Russia suspended its participation in the treaty, ceasing to comply with its verification and notification provisions, arguing that strategic arms control could not be disentangled from "the conflict in Ukraine or other hostile Western actions against our country" (Russian Federation 2023).

Russia's retreat from New START fits an alarming new pattern of coercive nuclear signaling to limit US and NATO assistance to Ukraine following Russia's second invasion in 2022 (Fink 2025; Young 2022). However, Russia did not exercise the withdrawal clause of New START, and it reassured the world that it would continue to adhere to the central limits of the agreement. The United States assessed with "high confidence that Russia did not engage in any large-scale activity above the Treaty limits" (US Department of State 2025). Russia's suspension of New START was an attempt to leverage the treaty for other political purposes, not a rejection of strategic arms control more broadly.

This was made clear by Putin's invitation to extend New START's limits on deployed strategic forces just months before the treaty's expiration. Putin's bluff was called: Strategic arms control between the United States and Russia is too valuable to be held hostage. Russia's about-face on New START is an opportunity for the United States to secure as many benefits as possible as we enter a period without a formal treaty in effect. As of this writing, the United States has not accepted Putin's offer for an informal extension of the treaty limits, but President Donald Trump has said, "It sounds like a good idea to me" (Shalal 2025).

It *is* a good idea—that is why strategic arms control has been foundational to the relationship of the two nuclear superpowers for over five decades, surviving every crisis and change of leadership. By placing mutual limits on their nuclear arsenals, the United States and Russia established an element of stability in an otherwise turbulent relationship, reduced the risk of nuclear conflict, and relieved themselves of the costly burden of arms racing. Arms control treaties allowed the United States and Russia, who together control the overwhelming majority of the world's nuclear weapons, to pursue enormous reductions in their nuclear stockpiles (Figure 1).

Figure 1. Number of US and Russian Nuclear Warheads over Time



Through nuclear arms control, the United States and Russia have made massive reductions in their nuclear arsenals since the heights of the Cold War.
SOURCE: Kristensen et al. 2025c.

Box 1. Quantitative Restrictions on Strategic Forces

New START's central restrictions place quantitative limits on the number of deployed nuclear warheads and delivery vehicles. Under the treaty, both the United States and Russia are permitted no more than

- 700 deployed strategic delivery vehicles (counted as Inter-Continental Ballistic Missiles [ICBMs], nuclear-capable heavy bombers, and warheads on Submarine-Launched Ballistic Missiles [SLBMs]);
- 800 total strategic delivery vehicles (deployed and nondeployed); and
- 1,550 nuclear warheads deployed on strategic delivery vehicles.

The 1,550 numerical limitation on strategic warheads includes all warheads loaded onto ICBMs and SLBMs. However, the treaty counts each nuclear-capable heavy bomber as a single warhead, regardless of how many warheads the bomber is carrying or capable of carrying. (In peacetime, nuclear warheads are not typically loaded onto heavy bombers but are stored separately on bomber bases, where they can be deployed rapidly in a crisis.) The 2010 *Nuclear Posture Review* explained that this counting idiosyncrasy reflects that "heavy bombers do not pose a first-strike threat to either side, and that on a day-to-day basis few or no bombers are loaded with nuclear weapons" (US Department of Defense 2010).

Because heavy bombers are counted only as a single warhead, the 1,550 warhead limit understates the deployed nuclear forces of the United States and Russia even when in compliance with the treaty. The best open-source estimate of US and Russian nuclear forces, produced by the Federation of American Scientists (FAS), includes all warheads stored at bomber bases in the calculation of deployed strategic forces. FAS's latest estimate counts 1,770 deployed strategic nuclear warheads for the United States and 1,718 deployed nuclear warheads for Russia (Kristensen et al. 2025a; Kristensen et al. 2025b).

The First Steps of a Nuclear Arms Race

Because of New START's rules and US and Russian arsenal structures, both countries could significantly exceed New START limits with existing stockpiles of warheads and delivery vehicles. The number of warheads deployed by the United States and Russia is only a fraction of each state's nuclear stockpile; both countries also keep many more strategic warheads in reserve (Table 1). New START does not restrict these warheads. The 2010 *Nuclear Posture Review* described the reserve forces in the US nuclear stockpile as "a technical hedge against any future problems with U.S. delivery systems or warheads, or as a result of a fundamental deterioration of the security environment" (US Department of Defense 2010).

Table 1. Composition of US and Russian Nuclear Arsenals

	Deployed Strategic Warheads	Nondeployed Strategic Warheads	Nonstrategic Warheads	Retired Warheads	Total Warheads
United States	1,770	1,730	200	1,477	5,177
Russia	1,718	1,114	1,477	1,150	5,459

The United States and Russia both have large reserves of nuclear weapons, in addition to the warheads deployed on strategic delivery systems.
Note: Nonstrategic warheads are those designed for use on short-range (as opposed to long-range or strategic) delivery systems.
SOURCES: Kristensen et al. 2025a; Kristensen et al. 2025b.

New START balanced competing desires for stability and flexibility. During New START negotiations, both sides were concerned with possible "break-out"—a rapid change of nuclear force structure in violation of treaty terms that would leave the other party at a strategic disadvantage (US Mission Geneva 2009). To manage this risk, New START places limits on both deployed and nondeployed strategic vehicles, which in turn limits—but does not eliminate—opportunities to field reserve warheads on short notice.

When New START expires, the United States and Russia could rapidly expand their deployed nuclear forces. There are two primary pathways: uploading additional warheads onto deployed delivery systems and deploying additional delivery systems. Because both the US and Russia have ample options to quickly expand their arsenals, it is imperative to minimize the amount of time without restrictions on strategic nuclear deployment. Because the US and Russia can quickly re-arm, opportunities for de-escalation and negotiation could rapidly deteriorate, creating conditions that would be difficult to reverse.

US Options to Expand Strategic Nuclear Forces

The United States has several options to expand its deployed nuclear forces. Such a consequential decision could be made quickly, and there may be pressure to do so once New START has expired. The United States, like Russia, has three main methods for delivering nuclear warheads to a target, referred to as a nuclear triad: by land, on ICBMs; by sea, on SLBMs; and by air, on heavy bombers. Adding weapons to each leg of the nuclear triad would follow a different timeline, depending on the relevant logistics. The following sections detail the timelines for and risks of increasing the US deployed nuclear arsenal, as well as the capabilities of such an arsenal. If the decision were made to exceed New START's limits, the United States could deploy as many as 3,500 nuclear weapons in a few years.

Weeks

The fastest route to increasing deployed nuclear forces is through the air-based leg of the US nuclear triad. According to the latest data exchange under New START, the US Air Force deploys 43 total nuclear-capable heavy bombers, with an additional 17 held in reserve. Though approximately 780 warheads are assigned to the bomber fleet, only 300 are believed to be deployed at bomber bases, while the rest are stored at the Kirtland Underground Munitions Maintenance and Storage Complex in Albuquerque, New Mexico (Kristensen et al. 2025b).

Because New START counts heavy bombers as a single warhead, the United States could increase its deployed nuclear forces without violating the treaty simply by increasing the number of nuclear weapons stored at bomber bases. Following normal procedures, the United States could rapidly transfer these weapons from storage facilities to bomber bases using special ground transportation vehicles (US Department of Defense 2020). Within a matter of weeks, the air-based leg of the US nuclear triad could increase its stock from 300 to 780 deployed nuclear weapons (Table 2).

Table 2. Current Deployment and Maximum Capacity of US Air-Based Nuclear Forces

	Number Deployed/ Total	Capacity	Warheads Deployed (estimate)	Warheads Available in Reserve (estimate)
B-2A	10/18	16 gravity bombs	300	280
B-52H	33/42	20 air-launched cruise missiles		500
Total			300	780

The United States could field an additional 480 nuclear weapons on its bomber forces within a few weeks.
SOURCES: Kristensen et al. 2025b.

Months

The second-fastest US pathway to deploying additional nuclear weapons is through the sea-based leg of the nuclear triad. The United States currently operates a fleet of 14 *Ohio*-class submarines that carry SLBMs. Each *Ohio*-class submarine initially had 24 launch tubes for SLBMs, but 4 of those tubes were disabled to bring the United States in compliance with New START's limitations on delivery vehicles (US Department of Defense 2014). That reduction left 20 launch tubes per submarine, for a total of 280 launch tubes in the fleet. The ballistic missiles themselves can carry up to eight warheads, so the maximum capacity of the submarine fleet today stands at 2,240 warheads. An estimated 1,920 warheads are available for use in US submarines.

The United States currently operates the submarine fleet at well below its maximum deployment of nuclear weapons. In 2022, the State Department reported that only 220 of the fleet's 280 launch tubes were armed with SLBMs (US Department of State 2022). Each SLBM

carries an estimated 4 to 5 warheads, rather than the maximum of 8; the total number of deployed warheads across the fleet is an estimated 970 (Kristensen et al. 2025b).

With the gulf between the current capacity and the maximum capacity of the *Ohio*-class submarines, the United States could deploy almost 1,000 additional nuclear weapons simply by loading them onto its submarines (Table 3). The speed of this process would depend on the patrol schedule, in addition to other logistical demands; uploading reserve warheads onto the entire fleet would require approximately six months (Howe 2025).

Table 3. Current Deployment and Maximum Capacity of US Sea-Based Nuclear Forces

	Number Deployed	Deployed Launchers	Warheads Deployed (estimate)	Warheads Available in Reserve (estimate)
***Ohio*-class submarines**	14	20 SLBMS (up to 8 warheads each) per submarine	970	1,920

The United States could field an additional 950 nuclear warheads on its submarine fleet within six months.
Note: Although 14 Ohio-class submarines are counted as deployed under New START rules, not all 14 are at sea at the same time.
SOURCES: Kristensen et al. 2025b.

Years

The slowest option for increasing US deployed nuclear forces is through the land-based leg of the nuclear triad. This is also the most dangerous option. Unlike submarines and bombers, nuclear silos are vulnerable to attack, so the US nuclear command and control system is set up so that ICBMs may be launched on warning of an attack. ICBMs cannot be recalled once launched, like bombers can be. The fear that the retaliatory capability of silo-based missiles could be significantly depleted puts enormous time pressure on decisionmakers. If an even greater percentage of US nuclear forces were vulnerable in this way, it would create incentives for an adversary to strike first, using a smaller number of its own nuclear forces to destroy a greater number of US nuclear forces. This dynamic would increase the pressure on US decisionmakers to prepare to launch ICBMs on warning of an impending attack. This is why the United States opted to remove all but one warhead from each of its ICBMs in the past (MacDonald 2014); reversing that decision would reintroduce additional risks during a crisis (Wright, Hartung, and Gronlund 2020).

The United States operates 400 silos armed with a single ICBM. Each ICBM can be armed with either a single W87 warhead or up to three W78 warheads. Today, only 400 warheads are deployed as part of the land-based leg of the US nuclear triad, one for each deployed ICBM. Another 400 reserve warheads could be uploaded onto deployed ICBMs (Table 4). Because of infrastructure and workforce challenges, this process would likely take several years (Howe 2025).

Table 4. Current Deployment and Maximum Capacity of US Land-Based Nuclear Forces

	Number Deployed/ Total	Deployed Launchers/Total capacity	Warheads Deployed (estimate)	Warheads Available in Reserve (estimate)
Silos	400/450	400/450	400	800

The United States could field an additional 400 nuclear weapons on its ICBMs within a few years.
SOURCES: Kristensen et al. 2025b.

Russia's Options to Expand Its Strategic Forces

Though the United States has considerable intelligence assets to monitor Russia's nuclear arsenal, much less information is available in the public sphere. Like the United States, Russia structures its nuclear forces in a nuclear triad. Each leg of that triad has excess capacity for deploying additional nuclear weapons on a similar timeline to its US counterpart: weeks to complete the expansion of air-based forces, months to complete the expansion of sea-based forces, and years to complete the expansion of land-based forces. The FAS estimates that Russia has the capacity to add 386 nuclear weapons to its bomber fleet, 352 nuclear weapons to its submarine fleet, and 376 weapons to its ICBM fleet (Table 5).

Table 5. Current Deployment and Maximum Capacity of Russian Nuclear Forces

	Warheads Deployed (estimate)	Warheads Available in Reserve (estimate)
ICBMs	878	1,254
Heavy Bombers	200	586
SLBMs	640	992
Total	1,718	2,832

Russia could field 1,114 additional nuclear weapons above its current deployment of 1,718 warheads.
SOURCES: Kristensen et al. 2025a.

At 2,832 nuclear weapons, Russia's upload capacity sits below that of the United States, which could field as many as 3,500 nuclear weapons with existing forces. However, because of Russia's lack of transparency and latent warhead production capacity, some analysts argue that Russia's upload potential could be much higher, by as many as thousands of warheads (Howe 2025; Schneider 2019; Schneider 2023).

Even if the United States currently has a quantitative advantage over Russia in upload capacity, that advantage may evaporate quickly in an arms race. Russia is believed to have a robust nuclear industrial base with "the capacity to process thousands of warheads annually" (Ashley 2019), though that capacity may have been impacted by Russia's ongoing war in

Ukraine. Meanwhile, the United States is investing enormous resources to bolster its production capacity of plutonium pits, key components to building new nuclear warheads for its stockpile. In 2015, Congress mandated that the United States reach the capacity to produce 80 plutonium pits annually by 2030. However, despite the years of work and billions of dollars spent, the project still has no complete schedule, no official cost estimate, and, as widely predicted and ultimately acknowledged by leading officials, no hope of meeting its 2030 goal (Spaulding 2025).

Arms Control for Everyone's Sake

If Russia increases its nuclear deployments, the United States would feel pressure to respond in kind, and vice versa. Other technological developments may also increase this pressure, including emerging technologies that might affect the arsenals' survivability against attack; cyber-, space- and ground-based weapons that can compromise command and control; and strategic missile defenses. The United States should carefully consider its next steps and not unilaterally increase this pressure.

This is the nature of arms racing: Each step to secure an advantage over an adversary drives a response, nullifying the supposed advantage while introducing new threats that prompt further military investments. During the Cold War, this pattern of escalation resulted in bloated arsenals of tens of thousands of nuclear weapons—strategically pointless, tragically wasteful, dangerously irresponsible.

Both the United States and Russia planned their nuclear modernization programs around deployment levels consistent with New START. The United States is still in the early stages of what will be a decades-long effort to rebuild, refurbish, or replace nearly every component of its strategic nuclear forces. What was originally described as a trillion-dollar investment has already doubled in estimated costs (Weiner 2024). Poor management, technical hurdles, and workforce shortages have caused key projects to be delayed and may ultimately require some programs to be cut (CBO 2025; GAO 2023).

However, if the United States and Russia descend into unconstrained nuclear competition, the United States could exhaust the reserves of its nuclear arsenal in a few years. To restore flexibility and prepare for unconstrained competition with Russia, it would need to invest in new warheads and delivery systems beyond the planned modernization program. This investment would further complicate and add hundreds of billions of dollars to the costs of an already overburdened program (CBO 2020). Schedule delays and cost increases would continue, putting domestic needs and other defense priorities at risk. The United States would not be well served by running an arms race (and, indeed, may be incapable with its existing infrastructure and workforce).

Neither would Russia. In 2022, Russia launched a full-scale invasion of Ukraine, escalating a conflict that it initiated in 2014 with Russia's seizure of Crimea. Four years later, Russia is still embroiled in a profoundly destructive war of attrition, one that has eroded its conventional forces and resulted in an estimated 1 million Russian casualties (Cooper 2025). When the conflict ends, Russia will turn from one enemy to the next: an economy depressed by international sanctions and warped by defense production and combat deployment (Prokopenko 2025).

In the context of these challenges, Russia's offer to extend the limitations of New START is not surprising. It is obvious why Russia would not want to add a nuclear buildup to its list of problems. But it should be equally obvious that Russia can and *will* compete with a US nuclear buildup if it must. Russia's war in Ukraine has demonstrated how far Russia will go to secure its strategic interests, regardless of the consequences to global security, regardless of the human suffering, and regardless of the material costs.

In the post–Cold War world, a new arms race could be even more destabilizing. Nuclear competition between the United States and Russia could affect the other seven countries with nuclear weapons. Nuclear proliferation could cascade and compound across the world.

In 2022, the US Congress launched a bipartisan commission to examine the nation's strategic nuclear posture. In its final report, the commission concluded that the United States should prepare to expand its nuclear forces to counter not only Russia but China as well, arguing that a "two-nuclear-peer threat requires a U.S. nuclear force that is either larger in size, different in composition, or both" (US Strategic Posture Commission 2023).

However, calling China a nuclear peer to the United States is a serious mischaracterization, just as assuming China would not respond to a US nuclear buildup is a serious misjudgment. China has substantially expanded its own nuclear forces in recent years, but it still possesses only 600 nuclear warheads (Lague 2025). China's nuclear arsenal remains vastly smaller than the arsenal of the United States or Russia. Even at its current rate of expansion, China would take years to reach the deployed New START limits (if it chose to do so). China's consistent position is that trilateral arms control does not make sense until US and Russian reductions make their nuclear forces comparable to China's much smaller arsenal (Rust 2025). If US and Russian arsenals expand following the expiration of New START, it may put pressure on China and other countries to expand their own nuclear forces in turn, or it may further reduce incentives to bring them into the discussion about sensible arms control limits.

Recommendations

To preserve stability in the US-Russian relationship, reduce the risk of nuclear conflict, and prevent a rapid nuclear arms race, the United States should do the following:

- **Accept Russia's offer to extend New START limits for one year.** It will take a great deal of time and work to secure the next strategic arms control treaty. But the first step—extending the limits of New START—is easy. Russia has already offered to extend the limits of New START, creating space for further negotiations. Now it is up to the United States to accept that offer. No negotiations are required, just a public US commitment to continue observing the treaty's limits for strategic arms deployment.

- **Implement New START's verification activities for as long as possible.** The United States and Russia should resume data exchanges and notifications about their nuclear forces as mandated by New START. These practices ended after Russia announced its suspension of the treaty, but their resumption could reduce uncertainty at a critical time. While the treaty is still in force, the United States and Russia could also conduct a final round of on-site inspections of the other party's key nuclear facilities. This would give each party additional insight into the other's nuclear forces, improving stability and providing a foundation for further arms control negotiations (Gottemoeller 2025).

- **Launch negotiations for a follow-on arms control agreement or risk-reduction framework.** The one-year extension of New START's central restrictions will buy time for the United States and Russia to develop a durable framework to address emerging technologies, strategic stability, and verification. Deeper quantitative reductions in US and Russian forces could pave the way for China and other states to participate for the first time in strategic arms control efforts.

Arms control between the United States and Russia does not rely on trust or good will. Both countries closely surveil one another, and both countries would likely respond aggressively to any substantive change to the other's nuclear forces. Arms control relies on mutual interest and is not a gift to one's adversary: The United States and Russia are both more secure when they adhere to mutual limits on nuclear weapons.

The debate around New START often places too much emphasis on the significance of New START's expiration date, framing the end of the treaty as either an opportunity for nuclear expansion or a threat to nuclear restraint. The United States and Russia could rapidly deploy thousands more nuclear weapons than they do right now, and on February 5, 2026, they will be legally clear to do so.

But in reality, there is no higher authority to enforce the treaty's terms, and both states could have exercised their rights to withdraw from the treaty at any point since it entered into force in 2011. Russia and the United States have adhered to New START's limits because of mutual benefit, not legal obligation. When the legal obligations end, they can still cooperate to secure those benefits.

Author

Jennifer Knox is a policy and research analyst for the Union of Concerned Scientists.

Acknowledgments

This analysis was made possible by the generous support of Ploughshares, The Prospect Hill Foundation, and UCS members. The opinions expressed herein do not necessarily reflect those of the organizations that funded the work or the individuals who reviewed it. The Union of Concerned Scientists bears sole responsibility for the report's content.

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