



# Nuclear Threats

## Summary and Key Talking Points

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### Policy Proposals

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1. Adequately fund U.S. nuclear weapons modernization programs and the infrastructure that supports them.
2. Restore America's strategic deterrence by building the nuclear arsenal of the 21st century.
3. Develop new means of protection for the American public and continue to assure U.S. allies.
4. Continue to support tools that make it harder for adversarial states to develop and procure nuclear weapons, and easier for the U.S. to detect such attempts.

### Quick Facts

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1. Russia has threatened the United States and its allies with nuclear weapons numerous times in recent years. Russia's war against Ukraine has only increased the nuclear saber-rattling out of Moscow, to include moving nuclear-capable systems into Belarus and de-ratifying the Comprehensive Nuclear Test Ban Treaty.
2. Since the end of the Cold War, the U.S. reduced its nuclear stockpile by over 90 percent.
3. Iran has built up the largest ballistic missile force in the Middle East region as well as a huge nuclear infrastructure that it does not need for civilian purposes.
4. The 44 U.S. long-range ballistic missile defense interceptors will not suffice to address the advancing ballistic missile threat to the United States.

### Power Phrases

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#### Confront New and Old Threats

- Russia is adding to its nuclear arsenal and fielding new delivery systems that include novel capabilities, such as nuclear-armed hypersonic missiles launched from the air, land, and sea.
- China is building a nuclear weapons capability aimed at holding U.S. allies in the Western Pacific hostage to potential nuclear blackmail, and it is developing novel nuclear technologies, such as nuclear-capable hypersonic weapons.
- The U.S. must also worry about non-state actors and the sale of nuclear technologies on the black market.

### Invest in the American Arsenal

- America's foes have advanced their nuclear weapon systems while ours deteriorates. America needs a renewed commitment to the U.S. nuclear enterprise and the technological knowledge and infrastructure that supports it.
- U.S. nuclear laboratories have a fundamental role in improving American understanding of the design and effects of our adversaries' weapons.
- The United States must continue to pursue the development of a comprehensive, layered missile defense system that can address incoming threats in all phases of flight.

### The Issue

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The nuclear threat environment is more complex and dangerous to Americans than it was during the Cold War. During the Cold War, the United States had to worry primarily about one large adversary, the Soviet Union. Since the dissolution of the Soviet Union, the United States shifted its focus to smaller conventional operations and counterterrorism. As a result, U.S. policymakers have neglected nuclear issues.

Today, the United States relies on legacy Cold War–era nuclear weapons and supporting infrastructure as Russia, China, and North Korea expand their nuclear forces and Iran adds to its missile arsenal with the intent to build nuclear weapons.

In other words, the U.S. objective of deterring a large-scale attack against the homeland and America's allies is as important as it was during the Cold War, while doing so has become far more challenging. At the same time, the United States largely has divested of its theater, non-strategic nuclear arsenal, while its adversaries are building up in this area.

Russia is adding to its nuclear arsenal and fielding new delivery systems that include novel capabilities, such as nuclear-armed hypersonic missiles launched from air, land, and sea. Russia continues to view nuclear weapons as central to warfighting—especially battlefield non-strategic nuclear weapons that could be used in an “escalate to de-escalate strategy.” In this scenario, Russia might use a low-yield nuclear weapon first in a conventional conflict to compel the United States or its allies to back down from further escalation. Indeed, today, Russia has roughly 2,000 such weapons, while the United States has 200.

China is engaging in a breathtaking expansion of its nuclear forces, potentially adding hundreds of new missiles to its intercontinental ballistic missile (ICBM) arsenal and putting it on track to achieve nuclear parity, if not superiority, over the United States within a decade. In addition, China is building a nuclear weapons capability aimed at holding U.S. allies in the Western Pacific hostage to potential nuclear blackmail, and novel nuclear technologies, such as nuclear-capable hypersonic weapons, are in development. With nuclear forces capable of striking both the U.S. homeland and U.S. forces and allies in the Indo–Pacific, Beijing conceivably could coerce the United States and potentially constrain U.S. response options, particularly given the lack of American theater nuclear weapons in the Western Pacific.

Since 2017, North Korea has fielded 10 new missile systems that are capable of reaching South Korea and U.S. forces stationed there in addition to successfully testing sea-launched nuclear capabilities, as well as two ICBMs capable of reaching the American homeland. Pyongyang also recently exploded a hydrogen bomb 10 times more powerful than the atomic bombs used at the end of World War II. Iran has built up the largest ballistic missile force in the Middle East and has been enriching uranium, which is required to build nuclear weapons. The United States, however, has fielded no new delivery systems in recent years and remains the only nuclear-weapons state incapable of producing new nuclear weapons in quantity, despite being in the 13th year of a decades-long nuclear modernization program.

Thus, for the first time in its history, the United States will need to contend with two large nuclear peer (or even, nuclear superior) adversaries—Russia and China—as well as a growing nuclear arsenal in North Korea.

Today, the United States must worry not only about state actors and nuclear weapon technologies, but also about non-state actors, as Pakistani scientist A. Q. Khan and his network have shown. (Khan was selling nuclear technologies on the black market to anyone willing to pay for them.) For decades, the United States has pursued nonproliferation policies that would keep the number of nuclear-armed states as small as possible by making it more difficult for state and non-state actors to obtain nuclear weapons and the means to deliver them.

America's nuclear policy should account for negative developments in the threat area as well as for deterioration of the U.S. nuclear enterprise and the intellectual and physical infrastructure that supports it. Because nuclear weapons pose the only direct existential threat to the United States, Congress and the Administration must re-energize measures to understand new developments in this area and their implications for U.S. and allied security.

## Recommendations

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In order to protect the U.S. and its allies from nuclear attack, Congress and the Administration should:

**Restore America's strategic deterrence by building the nuclear arsenal of the 21st century.** The U.S. government must understand what deters nuclear-armed states and structure its defense and nuclear postures accordingly. The changes in nuclear threats, especially China's expected vast nuclear expansion, make it essential that the United States update its nuclear posture and expand and diversify its strategic and nonstrategic nuclear arsenals to meet new threat and deterrence requirements. It should reject the naive belief that U.S. unilateral disarmament and lack of nuclear weapons modernization will incentivize other countries to give up their nuclear weapons. Indeed, it is the lack of investment in nuclear capabilities that has emboldened U.S. adversaries and upset strategic stability.

**Adequately fund U.S. nuclear weapons modernization programs and their supporting infrastructure.** Washington must accept that modern and flexible nuclear weapons and their supporting infrastructure are necessary for deterring nuclear attack on the United States and its allies; outdated, Cold War-era nuclear forces will lose credibility over time. Congress and the Administration must fully fund U.S. nuclear forces and infrastructure. This includes continued support for the development of a nuclear-armed sea-launched cruise missile and potentially other diverse systems as the threats evolve.

**Develop means of protection for the American public and allies.** Missiles remain a delivery method of choice for U.S. nuclear-armed adversaries and competitors because of their relatively short flight times and low cost. The spread of these systems to countries like North Korea that threaten the United States and allies with ballistic and cruise missile attacks increases the imperative for the United States to develop a system that is capable of protecting the U.S. homeland and allies. The United States must continue to pursue development of a comprehensive, layered missile defense system that can address incoming threats in all phases of flight.

**Continue to assure allies.** Just as the United States must think through new deterrence strategies and requisite capabilities for different nuclear-armed actors, it must also think carefully about how it reassures its allies. Reassurance is critical because it dissuades other countries from building their own nuclear weapons. For example, both Japan and South Korea have the technological ability and access to material with which to build their own nuclear weapons should they question U.S. commitment to their security. More nuclear-armed states would further increase the complexity of today's nuclear landscape, undermining U.S. interests and reversing decades of U.S. nonproliferation policy.

**Continue U.S. nonproliferation and counterproliferation measures.** The federal government should continue to support tools that make the development and procurement of nuclear weapons and the technologies that enable them more difficult and easier for the United States to detect. One way to accomplish this would be through a partnership with other countries through the global Proliferation Security Initiative launched in 2003. Another would be by developing the technological capabilities and skills that make tracking and attributing weapons-grade materials more difficult. Such interdiction efforts contribute to international security.

**Restore U.S. nuclear intelligence capabilities.** For almost a decade, the United States has focused most of its intelligence collection resources on ongoing low-intensity and counterterrorism operations in the Middle East. As a partial consequence, the ability of the U.S. to assess foreign adversaries' nuclear weapons programs has deteriorated. Congress and the Administration should work together to provide the resources that the U.S. intelligence community needs to be more adept at understanding the development of adversaries' nuclear weapons and capabilities. U.S. nuclear laboratories have a fundamental role in improving America's understanding of the design and effects of its adversaries' weapons.

## Facts + Figures

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**FACT: At least three hostile countries—China, North Korea, and Russia—threaten the United States and its allies with nuclear attacks. These countries either have or are developing nuclear warheads and delivery systems to enable them to execute such attacks and add credibility to their threats.**

- In 2017, North Korea successfully tested two ICBM systems that demonstrated the ability to target the United States with nuclear warheads. In October 2020, Pyongyang paraded the world's largest road-mobile ICBM. The regime subsequently announced that the missile would have multiple warheads. Combined with its recent ability to produce mobile ICBM launchers indigenously, this raises the possibility that North Korea might be able to overwhelm America's missile defenses.
- In February 2019, Russian President Vladimir Putin threatened to aim Russia's nuclear weapons at the United States and its European allies should the United States position new intermediate-range missiles in Europe. This was by no means an isolated incident. Russia has threatened the United States and its allies with nuclear weapons numerous times in recent years. Russia's war against Ukraine has only increased the nuclear saber-rattling out of Moscow, to include moving nuclear-capable systems into Belarus and de-ratifying the Comprehensive Nuclear Test Ban Treaty.
- Iran has built up the largest ballistic missile force in the Middle East region as well as a huge nuclear infrastructure that it does not need for civilian purposes. These moves make sense only if Tehran plans to arm the missiles with nuclear warheads. Since coming to power in the 1979 revolution, Iran's radical leaders have denounced the United States as the world-devouring "Great Satan," and Iran has become the largest state sponsor of terrorism.

**FACT: There is no empirical evidence that U.S. nuclear weapons reductions have dissuaded other countries from developing their own nuclear weapons capabilities.**

- Since the end of the Cold War, the United States has reduced its nuclear stockpile by more than 90 percent from highs during the Cold War. Yet new nuclear weapon states have emerged, including India, Pakistan, and North Korea, and both Russia and China have expanded their capabilities.
- Despite calls for future arms control treaties, Russia has violated or withdrawn from three nuclear arms control treaties in the past 10 years alone. China has rebuffed every attempt for a dialogue on its potential participation in nuclear arms treaties. All this took place as the United States reduced the role and salience of nuclear weapons within its own defense posture.

- Other countries develop their nuclear capabilities based on their perceived individual national interests and security situation. To change their calculus, U.S. policy must address the underlying conditions that influence the decision to move forward with nuclear programs and make it too costly to pursue nuclear weapons programs.

**FACT: Because other countries will continue to develop and rely on nuclear weapons for decades to come, the United States must develop means to defend itself and its allies from their devastating effects.**

- A safe, secure, reliable, and effective U.S. nuclear arsenal and modern and flexible supporting infrastructure are essential to deterring attacks against the United States and its allies.
- The United States currently deploys only 44 long-range ballistic missile defense interceptors in Alaska and California. These interceptors cannot address the magnitude of the Russian and Chinese nuclear threats and will need to advance in both number and capability just to outpace the North Korean nuclear threat.
- The federal government must work not only to increase U.S. abilities and those of its allies to disrupt other nations' nuclear programs, but also to manage the consequences of a potential nuclear attack.

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