To extend the life of the Minuteman III and redirect savings from the development of the new ground-based strategic deterrent program toward the development of a universal coronavirus vaccine, and for other purposes.

IN THE SENATE OF THE UNITED STATES

Mr. Markey (for himself, Mr. Van Hollen, Mr. Sanders, and Mr. Merkley) introduced the following bill; which was read twice and referred to the Committee on ___________________

A BILL

To extend the life of the Minuteman III and redirect savings from the development of the new ground-based strategic deterrent program toward the development of a universal coronavirus vaccine, and for other purposes.

1 Be it enacted by the Senate and House of Representa-
2 tives of the United States of America in Congress assembled,
3 SECTION 1. SHORT TITLE.
4 This Act may be cited as the “Investing in Cures Be-
5 fore Missiles Act of 2021” or the “ICBM Act”.
6 SEC. 2. FINDINGS.
7 Congress finds the following:
(1) According to the Congressional Budget Office, the projected cost to sustain and modernize the United States nuclear arsenal, as of 2017, “is $1.2 trillion in 2017 dollars over the 2017–2046 period: more than $800 billion to operate and sustain (that is, incrementally upgrade) nuclear forces and about $400 billion to modernize them”. With inflation, the cost rises to $1,700,000,000,000 and does not include the cost of the additional nuclear capabilities proposed in the 2018 Nuclear Posture Review.

(2) The Government Accountability Office found in July 2020 that the Department of Defense and the National Nuclear Security Administration have still not taken meaningful steps to address affordability concerns or heeded the Government Accountability Office’s recommendation to consider “deferring the start of or cancelling specific modernization programs”, including the W87–1 warhead modification program, to address increases in the weapons activities budget requests of the National Nuclear Security Administration.

(3) The ground-based strategic deterrent program is expected to cost between $93,100,000,000 and $95,800,000, which does not include the cost of the W87–1 warhead modification program or the
cost to produce new plutonium pits for the warhead.

The total estimated life cycle cost of the ground-based strategic deterrent program is $264,000,000,000, and the program is intended to replace 400 deployed Minuteman III missiles with more than 600 new missiles, to allow for test flights and spares.

(4) The Air Force awarded a sole-source contract to Northrop Grumman for the engineering and manufacturing component of the ground-based strategic deterrent program in September 2020, raising concerns that the absence of competition for the award may result in higher than projected costs to United States taxpayers.

(5) The National Nuclear Security Administration is also in the early stages of developing a replacement intercontinental ballistic missile warhead, the W87–1, and expanding plutonium pit production to build new warhead cores, costing at least $12,000,000,000 and $9,000,000,000, respectively, to meet the modernization needs of the ground-based strategic deterrent program.

(6) Maintaining and updating the current Minuteman III missiles is possible for multiple decades and, according to the Congressional Budget Office,
through 2036, this would cost $37,000,000,000 less in 2017 dollars than developing and deploying the ground-based strategic deterrent program.

(7) A public opinion poll conducted from October 12 to 28, 2020, by ReThink Media and the Federation of American Scientists found that only 26 percent of registered voters in the United States preferred replacing the Minuteman III intercontinental ballistic missile with the ground-based strategic deterrent, as compared to 60 percent of registered voters who opposed replacing the Minuteman III missile.

(8) On April 3, 2019, Lieutenant General Richard M. Clark, then-Air Force Deputy Chief of Staff for Strategic Deterrence and Nuclear Integration, noted in testimony before the Committee on Armed Services of the House of Representatives that we have “one more opportunity” to conduct life extension on the Minuteman III intercontinental ballistic missile, indicating the technical feasibility of extending the Minuteman III missile despite his stated preference for the ground-based strategic deterrent.

(9) Even in the absence of an intercontinental ballistic missile leg of the triad, the 2018 Nuclear Posture Review signaled that the United States
would have an assured retaliatory capability in the form of several ballistic missile submarines, which are, “at present, virtually undetectable, and there are no known, near-term credible threats to the survivability of the [ballistic missile submarine] force”, a benefit that will be enhanced as the Department of Defense moves to replace the Ohio class ballistic submarine fleet with the new Columbia class ballistic missile fleet.

(10) While intercontinental ballistic missiles had historically been the most responsive leg of the United States nuclear triad, advances in ballistic missile submarine communications to allow for the dissemination of emergency action messages in wartime have negated that advantage.

(11) Intercontinental ballistic missiles cannot be recalled, leaving decision-makers with mere minutes to decide whether to launch the missiles before they are destroyed, known as a posture of “launch on warning” or “launch under attack” in the face of a perceived nuclear attack, greatly increasing the risk of a national leader initiating a nuclear war by mistake.

(12) In 1983, Stanislav Petrov, a former lieutenant colonel of the Soviet Air Defense Forces cor-
rectly identified a false warning in an early warning system that showed several United States incoming nuclear missiles, preventing Soviet leaders from launching a retaliatory response, earning Colonel Petrov the nickname “the man who saved the world”.

(13) Former Secretary of Defense William Perry, who once briefed President Bill Clinton on a suspected Russian first nuclear strike, wrote that the ground-based leg of the nuclear triad is “destabilizing because it invites an attack” and intercontinental ballistic missiles are “some of the most dangerous weapons in the world” and “could even trigger an accidental nuclear war”.

(14) General James Cartwright, former vice chair of the Joint Chiefs of Staff and former Commander of the United States Strategic Command, wrote, with Secretary Perry, “[T]he greatest danger is not a Russian bolt but a US blunder—that we might accidentally stumble into nuclear war. As we make decisions about which weapons to buy, we should use this simple rule: If a nuclear weapon increases the risk of accidental war and is not needed to deter an intentional attack, we should not build it. . . . Certain nuclear weapons, such as...the [inter-
7
continental ballistic missile], carry higher risks of
accidental war that, fortunately, we no longer need
to bear. We are safer without these expensive weap-
ons, and it would be foolish to replace them.”.

(15) General George Lee Butler, the former
Commander-in-Chief of the Strategic Air Command
and subsequently Commander-in-Chief of the United
States Strategic Command, said, “I would have re-
moved land-based missiles from our arsenal a long
time ago. I’d be happy to put that mission on the
submarines. So, with a significant fraction of bomb-
ers having a nuclear weapons capability that can be
restored to alert very quickly, and with even a small
component of Trident submarines—with all those
missiles and all those warheads on patrol—it’s hard
to imagine we couldn’t get by.”.

(16) While a sudden “bolt from the blue” first
strike from a near-peer nuclear adversary is a highly
unlikely scenario, extending the Minuteman III
would maintain the purported role of the interconti-
nental ballistic missile leg of the triad to absorb such
an attack.
SEC. 3. STATEMENT OF POLICY ON EXTENSION OF LIFE-SPAN OF MINUTEMAN III AND DEVELOPING A VACCINE OF MASS PREVENTION.

It is the policy of the United States that—

(1) the operational life of the Minuteman III missiles can be safely extended until at least 2050; and

(2) investments in developing a universal coronavirus vaccine and efforts to save lives from other types of infectious diseases are a better use of United States taxpayer resources than building a new and unnecessary intercontinental ballistic missile.

SEC. 4. AVAILABILITY OF FUNDS FOR VACCINES INSTEAD OF MISSILES.

(a) Transfer From Department of Defense.—

Of the unobligated balances of appropriations made available for the Department of Defense for the research, development, test, and evaluation of the ground-based strategic deterrent program, the Secretary of Defense shall transfer $1,000,000,000 to the National Institute of Allergy and Infectious Diseases to conduct or support comprehensive research for the development of a universal coronavirus vaccine.

(b) Transfer From National Nuclear Security Administration.—The Secretary of Energy shall trans-
fer all unobligated balances of appropriations made available for the National Nuclear Security Administration for the W87–1 warhead modification program to the Centers for Disease Control and Prevention to research and combat emerging and zoonotic infectious diseases.

SEC. 5. PROHIBITION ON USE OF FUNDS FOR GROUND-BASED STRATEGIC DETERRENT PROGRAM AND W87–1 WARHEAD MODIFICATION PROGRAM.

None of the funds authorized to be appropriated or otherwise made available for fiscal year 2022 may be obligated or expended for the ground-based strategic deterrent program or the W87–1 warhead modification program.

SEC. 6. INDEPENDENT STUDY ON EXTENSION OF MINUTEMAN III INTERCONTINENTAL BALLISTIC MISSILES.

(a) INDEPENDENT STUDY.—Not later than 30 days after the date of the enactment of this Act, the Secretary of Defense shall seek to enter into a contract with the National Academy of Sciences to conduct a study on extending the life of Minuteman III intercontinental ballistic missiles to 2050.

(b) MATTERS INCLUDED.—The study under subsection (a) shall include the following:
(1) A comparison of the costs through 2050 of—

(A) extending the life of Minuteman III intercontinental ballistic missiles; and

(B) deploying the ground-based strategic deterrent program.

(2) An analysis of opportunities to incorporate technologies into the Minuteman III intercontinental ballistic missile program as part of a service life extension program that could also be incorporated in the future ground-based strategic deterrent program, including, at a minimum, opportunities to increase the resilience against adversary missile defenses.

(3) An analysis of the benefits and risks of incorporating sensors and nondestructive testing methods and technologies to reduce destructive testing requirements and increase the service life and number of Minuteman III missiles through 2050.

(4) An analysis and validation of the methods used to estimate the operational service life of Minuteman II and Minuteman III motors, taking into account the test and launch experience of motors retired after the operational service life of such motors in the rocket systems launch program.
(5) An analysis of the risks and benefits of alternative methods of estimating the operational service life of Minuteman III motors, such as those methods based on fundamental physical and chemical processes and nondestructive measurements of individual motor properties.

(6) An analysis of risks, benefits, and costs of configuring a Trident II D5 submarine launched ballistic missile for deployment in a Minuteman III silo.

(7) An analysis of the impacts of the estimated service life of the Minuteman III force associated with decreasing the deployed intercontinental ballistic missiles delivery vehicle force from 400 to 300.

(8) An assessment on the degree to which the Columbia class ballistic missile submarines will possess features that will enhance the current invulnerability of ballistic missile submarines of the United States to future antisubmarine warfare threats.

(9) An analysis of the degree to which an extension of the Minuteman III would impact the decision of Russian Federation to target intercontinental ballistic missiles of the United States in a crisis, as compared to proceeding with the ground-based strategic deterrent.
(10) A best case estimate of what percentage of the strategic forces of the United States would survive a counterforce strike from the Russian Federation, broken down by intercontinental ballistic missiles, ballistic missile submarines, and heavy bomber aircraft.

(11) The benefits, risks, and costs of relying on the W–78 warhead for either the Minuteman III or a new ground-based strategic deterrent missile as compared to proceeding with the W–87 life extension.

(12) The benefits, risks, and costs of adding additional launchers or uploading submarine-launched ballistic missiles with additional warheads to compensate for a reduced deployment of intercontinental ballistic missiles of the United States.

(c) Submission to Department of Defense.—Not later than 180 days after the date of the enactment of this Act, the National Academy of Sciences shall submit to the Secretary a report containing the study conducted under subsection (a).

(d) Submission to Congress.—Not later than 210 days after the date of the enactment of this Act, the Secretary shall transmit to the appropriate congressional
committees report required by subsection (c), without
change.

(c) Form.—The report required by subsection (c)
shall be submitted in unclassified form, but may include
a classified annex.

SEC. 7. APPROPRIATE CONGRESSIONAL COMMITTEES DE-
FINED.

In this Act, the term “appropriate congressional com-
mittees” means—

(1) the Committee on Armed Services, the
  Committee on Foreign Relations, and the Committee
  on Appropriations of the Senate; and

(2) the Committee on Armed Services, the
  Committee on Foreign Affairs, and the Committee
  on Appropriations of the House of Representatives.