

116TH CONGRESS  
1ST SESSION

**S.** \_\_\_\_\_

To amend the Radiation Exposure Compensation Act to improve compensation for workers involved in uranium mining, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

Mr. CRAPO (for himself, Mr. UDALL, Mr. RISCH, Mr. HEINRICH, Mr. BENNET, and Mr. BOOKER) introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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**A BILL**

To amend the Radiation Exposure Compensation Act to improve compensation for workers involved in uranium mining, 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 “Radiation Exposure  
5 Compensation Act Amendments of 2019”.

6 **SEC. 2. REFERENCES.**

7 Except as otherwise specifically provided, whenever in  
8 this Act an amendment or repeal is expressed in terms  
9 of an amendment to or repeal of a section or other provi-

1 sion of law, the reference shall be considered to be made  
2 to a section or other provision of the Radiation Exposure  
3 Compensation Act (Public Law 101–426; 42 U.S.C. 2210  
4 note).

5 **SEC. 3. EXTENSION OF FUND.**

6 Section 3(d) is amended—

7 (1) by striking the first sentence and inserting  
8 “The Fund shall terminate 19 years after the date  
9 of the enactment of the Radiation Exposure Com-  
10 pensation Act Amendments of 2019.”; and

11 (2) by striking “22-year” and inserting “19-  
12 year”.

13 **SEC. 4. CLAIMS RELATING TO ATMOSPHERIC TESTING.**

14 (a) **LEUKEMIA CLAIMS RELATING TO TRINITY TEST**  
15 **IN NEW MEXICO AND TESTS IN THE PACIFIC.**—Section  
16 4(a)(1)(A) is amended—

17 (1) in clause (i)—

18 (A) in subclause (II)—

19 (i) by striking “in the affected area”  
20 and inserting “in an affected area”; and

21 (ii) by striking “or” after the semi-  
22 colon;

23 (B) by redesignating subclause (III) as  
24 subclause (V); and

1 (C) by inserting after subclause (II) the  
2 following:

3 “(III) was physically present in  
4 an affected area for the period begin-  
5 ning on June 30, 1945, and ending on  
6 July 31, 1945; or

7 “(IV) was physically present in  
8 an affected area—

9 “(aa) for a period of at least  
10 1 year during the period begin-  
11 ning on June 30, 1946, and end-  
12 ing on August 19, 1958; or

13 “(bb) for the period begin-  
14 ning on April 25, 1962, and end-  
15 ing on November 5, 1962; or”;  
16 and

17 (2) in clause (ii)(I), by striking “physical pres-  
18 ence described in subclause (I) or (II) of clause (i)  
19 or onsite participation described in clause (i)(III)”  
20 and inserting “physical presence described in sub-  
21 clause (I), (II), (III), or (IV) of clause (i) or onsite  
22 participation described in clause (i)(V)”.

23 (b) AMOUNTS FOR CLAIMS RELATED TO LEU-  
24 KEMIA.—Section 4(a)(1) is amended—

1           (1) in subparagraph (A) by striking “an  
2 amount” and inserting “the amount”; and

3           (2) by striking subparagraph (B) and inserting  
4 the following:

5           “(B) AMOUNT.—If the conditions de-  
6 scribed in subparagraph (C) are met, an indi-  
7 vidual who is described in subparagraph (A)(i)  
8 shall receive \$150,000.”.

9           (c) SPECIFIED DISEASES CLAIMS RELATING TO  
10 TRINITY TEST IN NEW MEXICO AND TESTS IN THE PA-  
11 CIFIC.—Section 4(a)(2) is amended—

12           (1) in subparagraph (A), by striking “in the af-  
13 fected area” and inserting “in an affected area”;

14           (2) in subparagraph (B)—

15                 (A) by striking “in the affected area” and  
16 inserting “in an affected area”; and

17                 (B) by striking “or” at the end;

18           (3) by redesignating subparagraph (C) as sub-  
19 paragraph (E); and

20           (4) by inserting after subparagraph (B) the fol-  
21 lowing:

22                 “(C) was physically present in an affected  
23 area for the period beginning on June 30,  
24 1945, and ending on July 31, 1945;

1                   “(D) was physically present in an affected  
2                   area—

3                   “(i) for a period of at least 2 years  
4                   during the period beginning on June 30,  
5                   1946, and ending on August 19, 1958; or

6                   “(ii) for the period beginning on April  
7                   25, 1962, and ending on November 5,  
8                   1962; or”.

9           (d) AMOUNTS FOR CLAIMS RELATED TO SPECIFIED  
10 DISEASES.—Section 4(a)(2) is amended in the matter fol-  
11 lowing subparagraph (E) (as redesignated by subsection  
12 (c) of this section) by striking “\$50,000 (in the case of  
13 an individual described in subparagraph (A) or (B)) or  
14 \$75,000 (in the case of an individual described in subpara-  
15 graph (C)),” and inserting “\$150,000”.

16           (e) MEDICAL BENEFITS.—Section 4(a) is amended  
17 by adding at the end the following:

18                   “(5) MEDICAL BENEFITS.—An individual re-  
19                   ceiving a payment under this section shall be eligible  
20                   to receive medical benefits in the same manner and  
21                   to the same extent as an individual eligible to receive  
22                   medical benefits under section 3629 of the Energy  
23                   Employees Occupational Illness Compensation Pro-  
24                   gram Act of 2000 (as enacted into law by Public  
25                   Law 106–398; 114 Stat. 165A–507).”.

1 (f) DOWNWIND STATES.—Section 4(b)(1) is amended  
2 to read as follows:

3 “(1) ‘affected area’ means—

4 “(A) except as provided under subpara-  
5 graphs (B) and (C), Arizona, Colorado, Idaho,  
6 Montana, Nevada, New Mexico, and Utah;

7 “(B) with respect to a claim by an indi-  
8 vidual under subsection (a)(1)(A)(i)(III) or  
9 (2)(C), only New Mexico; and

10 “(C) with respect to a claim by an indi-  
11 vidual under subsection (a)(1)(A)(i)(IV) or  
12 (2)(D), only Guam.”.

13 **SEC. 5. CLAIMS RELATING TO URANIUM MINING.**

14 (a) EMPLOYEES OF MINES AND MILLS.—Section  
15 5(a)(1)(A)(i) is amended—

16 (1) by inserting “(I)” after “(i)”;

17 (2) by striking “December 31, 1971; and” and  
18 inserting “December 31, 1990; or”; and

19 (3) by adding at the end the following:

20 “(II) was employed as a core driller in  
21 a State referred to in subclause (I) during  
22 the period described in such subclause;  
23 and”.

24 (b) MINERS.—Section 5(a)(1)(A)(ii)(I) is amended  
25 by inserting “or renal cancer or any other chronic renal

1 disease, including nephritis and kidney tubal tissue in-  
2 jury” after “nonmalignant respiratory disease”.

3 (c) MILLERS, CORE DRILLERS, AND ORE TRANS-  
4 PORTERS.—Section 5(a)(1)(A)(ii)(II) is amended—

5 (1) by inserting “, core driller,” after “was a  
6 miller”;

7 (2) by inserting “(I)” after “clause (i)”; and

8 (3) by striking all that follows “nonmalignant  
9 respiratory disease” and inserting “or renal cancer  
10 or any other chronic renal disease, including nephri-  
11 tis and kidney tubal tissue injury; or”.

12 (d) COMBINED WORK HISTORIES.—Section  
13 5(a)(1)(A)(ii) is further amended—

14 (1) by striking “or” at the end of subclause (I);  
15 and

16 (2) by adding at the end the following:

17 “(III)(aa) does not meet the condi-  
18 tions of subclause (I) or (II);

19 “(bb) worked, during the period de-  
20 scribed in clause (i)(I), in two or more of  
21 the following positions: miner, miller, core  
22 driller, and ore transporter;

23 “(cc) meets the requirements of para-  
24 graph (4) or (5), or both; and

1                   “(dd) submits written medical docu-  
2                   mentation that the individual developed  
3                   lung cancer or a nonmalignant respiratory  
4                   disease or renal cancer or any other chron-  
5                   ic renal disease, including nephritis and  
6                   kidney tubal tissue injury after exposure to  
7                   radiation through work in one or more of  
8                   the positions referred to in item (aa);”.

9           (e) DATES OF OPERATION OF URANIUM MINE.—Sec-  
10   tion 5(a)(2)(A) is amended by striking “December 31,  
11   1971” and inserting “December 31, 1990”.

12           (f) SPECIAL RULES RELATING TO COMBINED WORK  
13   HISTORIES.—Section 5(a) is amended by adding at the  
14   end the following:

15                   “(4) SPECIAL RULE RELATING TO COMBINED  
16                   WORK HISTORIES FOR INDIVIDUALS WITH AT LEAST  
17                   ONE YEAR OF EXPERIENCE.—An individual meets  
18                   the requirements of this paragraph if the individual  
19                   worked in one or more of the positions referred to  
20                   in paragraph (1)(A)(ii)(III)(bb) for a period of at  
21                   least one year during the period described in para-  
22                   graph (1)(A)(i)(I).

23                   “(5) SPECIAL RULE RELATING TO COMBINED  
24                   WORK HISTORIES FOR MINERS.—An individual  
25                   meets the requirements of this paragraph if the indi-



1       vidual, during the period described in paragraph  
2       (1)(A)(i)(I), worked as a miner and was exposed to  
3       such number of working level months that the Attor-  
4       ney General determines, when combined with the ex-  
5       posure of such individual to radiation through work  
6       as a miller, core driller, or ore transporter during  
7       the period described in paragraph (1)(A)(i)(I), re-  
8       sults in such individual being exposed to a total level  
9       of radiation that is greater or equal to the level of  
10      exposure of an individual described in paragraph  
11      (4).”.

12      (g) DEFINITION OF CORE DRILLER.—Section 5(b) is  
13      amended—

14           (1) by striking “and” at the end of paragraph  
15      (7);

16           (2) by striking the period at the end of para-  
17      graph (8) and inserting “; and”; and

18           (3) by adding at the end the following:

19           “(9) the term ‘core driller’ means any indi-  
20      vidual employed to engage in the act or process of  
21      obtaining cylindrical rock samples of uranium or va-  
22      nadium by means of a borehole drilling machine for  
23      the purpose of mining uranium or vanadium.”.

1 **SEC. 6. EXPANSION OF USE OF AFFIDAVITS IN DETERMINA-**  
2 **TION OF CLAIMS; REGULATIONS.**

3 (a) AFFIDAVITS.—Section 6(b) is amended by adding  
4 at the end the following:

5 “(3) AFFIDAVITS.—

6 “(A) EMPLOYMENT HISTORY.—For pur-  
7 poses of this Act, the Attorney General shall ac-  
8 cept a written affidavit or declaration as evi-  
9 dence to substantiate the employment history of  
10 an individual as a miner, miller, core driller, or  
11 ore transporter if the affidavit—

12 “(i) is provided in addition to other  
13 material that may be used to substantiate  
14 the employment history of the individual;

15 “(ii) attests to the employment history  
16 of the individual;

17 “(iii) is made subject to penalty for  
18 perjury; and

19 “(iv) is made by a person other than  
20 the individual filing the claim.

21 “(B) PHYSICAL PRESENCE IN AFFECTED  
22 AREA.—For purposes of this Act, the Attorney  
23 General shall accept a written affidavit or dec-  
24 laration as evidence to substantiate an individ-  
25 ual’s physical presence in an affected area dur-

1           ing a period described in section 4(a)(1)(A)(i)  
2           or section 4(a)(2) if the affidavit—

3                   “(i) is provided in addition to other  
4                   material that may be used to substantiate  
5                   the individual’s presence in an affected  
6                   area during that time period;

7                   “(ii) attests to the individual’s pres-  
8                   ence in an affected area during that pe-  
9                   riod;

10                  “(iii) is made subject to penalty for  
11                  perjury; and

12                  “(iv) is made by a person other than  
13                  the individual filing the claim.

14                  “(C) PARTICIPATION AT TESTING SITE.—  
15                  For purposes of this Act, the Attorney General  
16                  shall accept a written affidavit or declaration as  
17                  evidence to substantiate an individual’s partici-  
18                  pation onsite in a test involving the atmospheric  
19                  detonation of a nuclear device if the affidavit—

20                   “(i) is provided in addition to other  
21                   material that may be used to substantiate  
22                   the individual’s participation onsite in a  
23                   test involving the atmospheric detonation  
24                   of a nuclear device;

1                   “(ii) attests to the individual’s partici-  
2                   pation onsite in a test involving the atmos-  
3                   pheric detonation of a nuclear device;

4                   “(iii) is made subject to penalty for  
5                   perjury; and

6                   “(iv) is made by a person other than  
7                   the individual filing the claim.”.

8           (b) TECHNICAL AND CONFORMING AMENDMENTS.—  
9   Section 6 is amended—

10           (1) in subsection (b)(2)(C), by striking “section  
11           4(a)(2)(C)” and inserting “section 4(a)(2)(E)”;

12           (2) in subsection (c)(2)—

13           (A) in subparagraph (A)—

14           (i) in the first sentence, by striking  
15           “subsection (a)(1), (a)(2)(A), or (a)(2)(B)  
16           of section 4” and inserting “subsection  
17           (a)(1), (a)(2)(A), (a)(2)(B), (a)(2)(C), or  
18           (a)(2)(D) of section 4”; and

19           (ii) in clause (i), by striking “sub-  
20           section (a)(1), (a)(2)(A), or (a)(2)(B) of  
21           section 4” and inserting “subsection  
22           (a)(1), (a)(2)(A), (a)(2)(B), (a)(2)(C), or  
23           (a)(2)(D) of section 4”; and

1 (B) in subparagraph (B), by striking “sec-  
2 tion 4(a)(2)(C)” and inserting “section  
3 4(a)(2)(E)”; and

4 (3) in subsection (e), by striking “subsection  
5 (a)(1), (a)(2)(A), or (a)(2)(B) of section 4” and in-  
6 serting “subsection (a)(1), (a)(2)(A), (a)(2)(B), or  
7 (a)(2)(C) of section 4”.

8 (c) REGULATIONS.—Section 6(k) is amended by add-  
9 ing at the end the following: “Not later than 180 days  
10 after the date of enactment of the Radiation Exposure  
11 Compensation Act Amendments of 2019, the Attorney  
12 General shall issue revised regulations to carry out this  
13 Act.”.

14 **SEC. 7. LIMITATION ON CLAIMS.**

15 (a) EXTENSION OF FILING TIME.—Section 8(a) is  
16 amended—

17 (1) by striking “22 years” and inserting “19  
18 years”; and

19 (2) by striking “2000” and inserting “2019”.

20 (b) RESUBMITTAL OF CLAIMS.—Section 8(b) is  
21 amended to read as follows:

22 “(b) RESUBMITTAL OF CLAIMS.—

23 “(1) DENIED CLAIMS.—After the date of enact-  
24 ment of the Radiation Exposure Compensation Act  
25 Amendments of 2019, any claimant who has been

1 denied compensation under this Act may resubmit a  
2 claim for consideration by the Attorney General in  
3 accordance with this Act not more than three times.  
4 Any resubmittal made before the date of the enact-  
5 ment of the Radiation Exposure Compensation Act  
6 Amendments of 2019 shall not be applied to the lim-  
7 itation under the preceding sentence.

8 “(2) PREVIOUSLY SUCCESSFUL CLAIMS.—

9 “(A) IN GENERAL.—After the date of en-  
10 actment of the Radiation Exposure Compensa-  
11 tion Act Amendments of 2019, any claimant  
12 who received compensation under this Act may  
13 submit a request to the Attorney General for  
14 additional compensation and benefits. Such re-  
15 quest shall contain—

16 “(i) the claimant’s name, social secu-  
17 rity number, and date of birth;

18 “(ii) the amount of award received  
19 under this Act before the date of enact-  
20 ment of the Radiation Exposure Com-  
21 pensation Act Amendments of 2019;

22 “(iii) any additional benefits and com-  
23 pensation sought through such request;  
24 and

1                   “(iv) any additional information re-  
2                   quired by the Attorney General.

3                   “(B) ADDITIONAL COMPENSATION.—If the  
4                   claimant received compensation under this Act  
5                   before the date of enactment of the Radiation  
6                   Exposure Compensation Act Amendments of  
7                   2019 and submits a request under subpara-  
8                   graph (A), the Attorney General shall—

9                   “(i) pay the claimant the amount that  
10                  is equal to any excess of—

11                  “(I) the amount the claimant is  
12                  eligible to receive under this Act (as  
13                  amended by the Radiation Exposure  
14                  Compensation Act Amendments of  
15                  2019); minus

16                  “(II) the aggregate amount paid  
17                  to the claimant under this Act before  
18                  the date of enactment of the Radi-  
19                  ation Exposure Compensation Act  
20                  Amendments of 2019; and

21                  “(ii) in any case in which the claimant  
22                  was compensated under section 4, provide  
23                  the claimant with medical benefits under  
24                  section 4(a)(5).”.

1 **SEC. 8. ATTORNEY FEES.**

2 Section 9(b)(1) is amended by striking “2 percent”  
3 and inserting “10 percent”.

4 **SEC. 9. GRANT PROGRAM ON EPIDEMIOLOGICAL IMPACTS**  
5 **OF URANIUM MINING AND MILLING.**

6 (a) DEFINITIONS.—In this section—

7 (1) the term “institution of higher education”  
8 has the meaning given under section 101 of the  
9 Higher Education Act of 1965 (20 U.S.C. 1001);

10 (2) the term “program” means the grant pro-  
11 gram established under subsection (b); and

12 (3) the term “Secretary” means the Secretary  
13 of Health and Human Services.

14 (b) ESTABLISHMENT.—The Secretary shall establish  
15 a grant program relating to the epidemiological impacts  
16 of uranium mining and milling. Grants awarded under the  
17 program shall be used for the study of the epidemiological  
18 impacts of uranium mining and milling among non-occu-  
19 pationally exposed individuals, including family members  
20 of uranium miners and millers.

21 (c) ADMINISTRATION.—The Secretary shall admin-  
22 ister the program through the National Institute of Envi-  
23 ronmental Health Sciences.

24 (d) ELIGIBILITY AND APPLICATION.—Any institution  
25 of higher education or nonprofit private entity shall be eli-  
26 gible to apply for a grant. To apply for a grant an eligible



1 institution or entity shall submit to the Secretary an appli-  
2 cation at such time, in such manner, and containing or  
3 accompanied by such information as the Secretary may  
4 reasonably require.

5 (e) AUTHORIZATION OF APPROPRIATIONS.—There  
6 are authorized to be appropriated to carry out this section  
7 \$3,000,000 for each of fiscal years 2020 through 2022.

8 **SEC. 10. ENERGY EMPLOYEES OCCUPATIONAL ILLNESS**  
9 **COMPENSATION PROGRAM.**

10 (a) COVERED EMPLOYEES WITH CANCER.—Section  
11 3621(9) of the Energy Employees Occupational Illness  
12 Compensation Program Act of 2000 (42 U.S.C. 7384l(9))  
13 is amended by striking subparagraph (A) and inserting  
14 the following:

15 “(A) An individual with a specified cancer  
16 who is a member of the Special Exposure Co-  
17 hort, if and only if—

18 “(i) that individual contracted that  
19 specified cancer after beginning employ-  
20 ment at a Department of Energy facility  
21 (in the case of a Department of Energy  
22 employee or Department of Energy con-  
23 tractor employee) or at an atomic weapons  
24 employer facility (in the case of an atomic  
25 weapons employee); or

1 “(ii) that individual—

2 “(I) contracted that specified  
3 cancer after beginning employment in  
4 a uranium mine or uranium mill de-  
5 scribed under section 5(a)(1)(A)(i) of  
6 the Radiation Exposure Compensation  
7 Act (42 U.S.C. 2210 note) (including  
8 any individual who was employed in  
9 core drilling or the transport of ura-  
10 nium ore or vanadium-uranium ore  
11 from such mine or mill) located in  
12 Colorado, New Mexico, Arizona, Wyo-  
13 ming, South Dakota, Washington,  
14 Utah, Idaho, North Dakota, Oregon,  
15 Texas, or any State the Attorney Gen-  
16 eral makes a determination under sec-  
17 tion 5(a)(2) of that Act for inclusion  
18 of eligibility under section 5(a)(1) of  
19 that Act; and

20 “(II) was employed in a uranium  
21 mine or uranium mill described under  
22 subclause (I) (including any individual  
23 who was employed in core drilling or  
24 the transport of uranium ore or vana-  
25 dium-uranium ore from such mine or

1 mill) at any time during the period  
2 beginning on January 1, 1942, and  
3 ending on December 31, 1990.”.

4 (b) MEMBERS OF SPECIAL EXPOSURE COHORT.—  
5 Section 3626 of the Energy Employees Occupational Ill-  
6 ness Compensation Program Act of 2000 (42 U.S.C.  
7 7384q) is amended—

8 (1) in subsection (a), by striking paragraph (1)  
9 and inserting the following:

10 “(1) The Advisory Board on Radiation and  
11 Worker Health under section 3624 shall advise the  
12 President whether there is a class of employees—

13 “(A) at any Department of Energy facility  
14 who likely were exposed to radiation at that fa-  
15 cility but for whom it is not feasible to estimate  
16 with sufficient accuracy the radiation dose they  
17 received; and

18 “(B) employed in a uranium mine or ura-  
19 nium mill described under section 5(a)(1)(A)(i)  
20 of the Radiation Exposure Compensation Act  
21 (42 U.S.C. 2210 note) (including any individual  
22 who was employed in core drilling or the trans-  
23 port of uranium ore or vanadium-uranium ore  
24 from such mine or mill) located in Colorado,  
25 New Mexico, Arizona, Wyoming, South Dakota,

1 Washington, Utah, Idaho, North Dakota, Or-  
2 egon, Texas, and any State the Attorney Gen-  
3 eral makes a determination under section  
4 5(a)(2) of that Act for inclusion of eligibility  
5 under section 5(a)(1) of that Act, at any time  
6 during the period beginning on January 1,  
7 1942, and ending on December 31, 1990, who  
8 likely were exposed to radiation at that mine or  
9 mill but for whom it is not feasible to estimate  
10 with sufficient accuracy the radiation dose they  
11 received.”; and

12 (2) by striking subsection (b) and inserting the  
13 following:

14 “(b) DESIGNATION OF ADDITIONAL MEMBERS.—

15 “(1) Subject to the provisions of section  
16 3621(14)(C), the members of a class of employees at  
17 a Department of Energy facility, or at an atomic  
18 weapons employer facility, may be treated as mem-  
19 bers of the Special Exposure Cohort for purposes of  
20 the compensation program if the President, upon  
21 recommendation of the Advisory Board on Radiation  
22 and Worker Health, determines that—

23 “(A) it is not feasible to estimate with suf-  
24 ficient accuracy the radiation dose that the  
25 class received; and

1           “(B) there is a reasonable likelihood that  
2           such radiation dose may have endangered the  
3           health of members of the class.

4           “(2) Subject to the provisions of section  
5           3621(14)(C), the members of a class of employees  
6           employed in a uranium mine or uranium mill de-  
7           scribed under section 5(a)(1)(A)(i) of the Radiation  
8           Exposure Compensation Act (42 U.S.C. 2210 note)  
9           (including any individual who was employed in core  
10          drilling or the transport of uranium ore or vana-  
11          dium-uranium ore from such mine or mill) located in  
12          Colorado, New Mexico, Arizona, Wyoming, South  
13          Dakota, Washington, Utah, Idaho, North Dakota,  
14          Oregon, Texas, and any State the Attorney General  
15          makes a determination under section 5(a)(2) of that  
16          Act for inclusion of eligibility under section 5(a)(1)  
17          of that Act, at any time during the period beginning  
18          on January 1, 1942, and ending on December 31,  
19          1990, may be treated as members of the Special Ex-  
20          posure Cohort for purposes of the compensation pro-  
21          gram if the President, upon recommendation of the  
22          Advisory Board on Radiation and Worker Health,  
23          determines that—

1                   “(A) it is not feasible to estimate with suf-  
2                   ficient accuracy the radiation dose that the  
3                   class received; and

4                   “(B) there is a reasonable likelihood that  
5                   such radiation dose may have endangered the  
6                   health of members of the class.”.