

108<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# H. R. 5000

To require the Secretaries of Health and Human Services, Defense, and Homeland Security to carry out activities toward bringing to market effective medical countermeasures to radiation from a nuclear or radiological attack.

---

## IN THE HOUSE OF REPRESENTATIVES

JULY 22, 2004

Mr. WELDON of Pennsylvania (for himself and Mr. ISSA) introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Armed Services and Select Homeland Security, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

---

## A BILL

To require the Secretaries of Health and Human Services, Defense, and Homeland Security to carry out activities toward bringing to market effective medical countermeasures to radiation from a nuclear or radiological attack.

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 “Radioprotectant Pro-  
5        curement Act of 2004”.

1 **SEC. 2. FINDINGS.**

2 Congress finds as follows:

3 (1) The threat of a radiological or nuclear at-  
4 tack on the American people is one of the greatest  
5 potential threats now faced by the United States,  
6 considering the potential number of deaths, injuries,  
7 illnesses and economic devastation such an attack on  
8 American civilians or military personnel could have.

9 (2) There are at least 30,000 known nuclear  
10 weapons deployed around the world today and the  
11 proliferation of nuclear weapons technology con-  
12 tinues to pose an enormous threat to the United  
13 States, its people, and its interests and allies around  
14 the world.

15 (3) Even a crude radiological weapon, using  
16 conventional explosives combined with widely avail-  
17 able radiological materials, could cause death, radi-  
18 ation sickness, and widespread panic and economic  
19 hardship if detonated in an urban center of the  
20 United States, and such an attack would dramati-  
21 cally strain our public health resources.

22 (4) Numerous government and private studies,  
23 including the findings of several leading medical  
24 journals, have concluded that a nuclear weapon deto-  
25 nated in a large urban center would cause wide-  
26 spread death, sickness, and physical and economic

1 damage. For example, in February 2002, the British  
2 Medical Journal estimated that a 12.5 kiloton nu-  
3 clear bomb (approximately the size of the bomb used  
4 at Hiroshima), if detonated in New York City, would  
5 cause 50,000 immediate deaths, 200,000 short-term  
6 deaths from high-exposure radiation injury, and  
7 700,000 cases of radiation sickness.

8 (5) There are 103 nuclear power plants in the  
9 United States, each with the potential to expose area  
10 residents to high levels of radiation in the event of  
11 a successful attack.

12 (6) For potentially stockpiled radioprotectants  
13 to be most effective, they must be administered soon  
14 after exposure to radiation, so the procurement of a  
15 radioprotectant must be large enough and located in  
16 enough regions of the country to facilitate the rapid  
17 treatment of the hundreds of thousands and poten-  
18 tially millions of Americans who would be exposed to  
19 radiation, as well as the many “worried well” who  
20 will flood emergency rooms should a nuclear or radi-  
21 ological attack or large accident occur.

22 (7) Considering the need to rapidly administer  
23 a radioprotectant, Federal procurement of an effec-  
24 tive radioprotectant should be comparable to stock-

1 piles of other drugs designed to counter the effects  
2 of chemical or biological agents.

3 (8) Current treatment options for acute radi-  
4 ation exposure are wholly inadequate, with potas-  
5 sium iodide being the only widely stockpiled counter-  
6 measure currently available. This treatment protects  
7 against the long-term risk of thyroid cancer, and  
8 does nothing to counteract short-term radiation sick-  
9 ness and possible death within the first 30 days of  
10 exposure.

11 (9) Effective medical countermeasures to both  
12 acute and long-term exposure of radiation are pres-  
13 ently in development at the Armed Forces  
14 Radiobiology Research Institute (AFRRI) and  
15 among pharmaceutical companies, including at least  
16 one compound that has demonstrated efficacy in  
17 preventing radiation sickness and death caused by  
18 the destruction of bone marrow from acute radiation  
19 exposure.

20 (10) While the Departments of Health and  
21 Human Services, Homeland Security, and Defense  
22 are appropriately dedicating substantial resources to  
23 the development and procurement of counter-  
24 measures to biological threats, including smallpox  
25 and anthrax vaccines, few resources to date have



1 tive', as well as relevant departmental and subagency oper-  
2 ations budgets, subject to the appropriations Act in-  
3 volved.”.

4 **SEC. 4. REPORT REGARDING EFFECTIVE**  
5 **RADIOPROTECTANTS; DEVELOPMENT AND**  
6 **PROCUREMENT.**

7 (a) REPORT.—Not later than 120 days after the date  
8 of the enactment of this Act, the Secretary of Homeland  
9 Security (referred to in this section as the “Secretary”)  
10 shall, in consultation with the Secretary of Health and  
11 Human Services and the Secretary of Defense, submit to  
12 the Congress a report providing a determination by the  
13 Secretary of—

14 (1) the extent to which there is a threat of a  
15 nuclear or radiological attack against the United  
16 States; and

17 (2) the availability of effective radioprotectant  
18 medical countermeasures against the threat.

19 (b) DEVELOPMENT AND PROCUREMENT.—

20 (1) IN GENERAL.—If in carrying out subsection  
21 (a) the Secretary determines that one or more effec-  
22 tive radioprotectants are currently available, or may  
23 become available within a reasonable amount of  
24 time, then not later than 90 days after the submis-  
25 sion of the report under such subsection, the Sec-

1       retary shall enter into one or more agreements with  
2       one or more private companies for the development  
3       and procurement of one or more effective, safe, sta-  
4       ble, and low-cost radioprotectants, subject to the  
5       availability of funds under an appropriations Act.

6           (2) ADEQUATE PROTECTION.—An agreement  
7       under paragraph (1) shall provide for the procure-  
8       ment and stockpiling of enough dose regimens of the  
9       radioprotectants involved to provide for adequate  
10      protection of the people of the United States, includ-  
11      ing adequate response to a multi-location attack sce-  
12      nario, if in carrying out subsection (a) the Secretary  
13      determines that such a scenario is plausible.

14           (3) CERTAIN AUTHORITIES.—

15           (A) DEVELOPMENT.—With respect to an  
16      agreement under paragraph (1) that provides  
17      funds for the development of a radioprotectant,  
18      the Secretary may use the same authorities as  
19      are described in subsections (b) through (e) of  
20      section 319F–1 of the Public Health Service  
21      Act.

22           (B) PROCUREMENT.—With respect to an  
23      agreement under paragraph (1) that provides  
24      funds for the procurement of a radioprotectant,  
25      the Secretary may use the same authorities as

1 are described in section 319F-2(c)(7) of the  
2 Public Health Service Act.

3 (C) CONDITIONS.—An agreement under  
4 paragraph (1) may contain such reasonable  
5 conditions in addition to the conditions required  
6 in paragraph (2) as the Secretary determines to  
7 be appropriate, including—

8 (i) the condition that the final pro-  
9 curement be contingent upon approval of  
10 the radioprotectants by the Food and Drug  
11 Administration, subject to section 564 of  
12 the Federal Food, Drug, and Cosmetic  
13 Act; and

14 (ii) the condition that the company or  
15 companies that produce such  
16 radioprotectants may be required to as-  
17 sume the development costs of improve-  
18 ments to the radioprotectants.

○