

107TH CONGRESS  
2D SESSION

# S. 2487

To provide for global pathogen surveillance and response.

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## IN THE SENATE OF THE UNITED STATES

MAY 9, 2002

Mr. BIDEN (for himself, Mr. HELMS, Mr. KENNEDY, and Mr. FRIST) introduced the following bill; which was read twice and referred to the Committee on Foreign Relations

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# A BILL

To provide for global pathogen surveillance and response.

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 “Global Pathogen Sur-  
5       veillance Act of 2002”.

6       **SEC. 2. FINDINGS; PURPOSE.**

7       (a) FINDINGS.—Congress makes the following find-  
8       ings:

9                   (1) Bioterrorism poses a grave national security  
10                   threat to the United States. The insidious nature of  
11                   the threat, the likely delayed recognition in the event

1 of an attack, and the underpreparedness of the do-  
2 mestic public health infrastructure may produce cat-  
3 astrophic consequences following a biological weap-  
4 ons attack upon the United States.

5 (2) A contagious pathogen engineered as a bio-  
6 logical weapon and developed, tested, produced, or  
7 released in another country can quickly spread to  
8 the United States. Given the realities of inter-  
9 national travel, trade, and migration patterns, a  
10 dangerous pathogen released anywhere in the world  
11 can spread to United States territory in a matter of  
12 days, before any effective quarantine or isolation  
13 measures can be implemented.

14 (3) To effectively combat bioterrorism and en-  
15 sure that the United States is fully prepared to pre-  
16 vent, diagnose, and contain a biological weapons at-  
17 tack, measures to strengthen the domestic public  
18 health infrastructure and improve domestic surveil-  
19 lance and monitoring, while absolutely essential, are  
20 not sufficient.

21 (4) The United States should enhance coopera-  
22 tion with the World Health Organization, regional  
23 health organizations, and individual countries to help  
24 detect and quickly contain infectious disease out-

1       breaks or bioterrorism agents before they can  
2       spread.

3                   (5) The World Health Organization (WHO) has  
4       done an impressive job in monitoring infectious dis-  
5       ease outbreaks around the world, particularly with  
6       the establishment in April 2000 of the Global Out-  
7       break Alert and Response network.

8                   (6) The capabilities of the World Health Orga-  
9       nization are inherently limited in that its disease  
10      surveillance and monitoring is only as good as the  
11      data and information the World Health Organization  
12      receives from member countries and are further lim-  
13      ited by the narrow range of diseases (plague, chol-  
14      era, and yellow fever) upon which its disease surveil-  
15      lance and monitoring is based, and the consensus  
16      process used by the World Health Organization to  
17      add new diseases to the list. Developing countries in  
18      particular often cannot devote the necessary re-  
19      sources to build and maintain public health infra-  
20      structures.

21                   (7) In particular, developing countries could  
22      benefit from—

23                   (A) better trained public health profes-  
24      sionals and epidemiologists to recognize disease  
25      patterns;

(B) appropriate laboratory equipment for diagnosis of pathogens;

(C) disease reporting that is based on symptoms and signs (known as “syndrome surveillance”) enabling the earliest possible opportunity to conduct an effective response;

(D) a narrowing of the existing technology gap in syndrome surveillance capabilities, based on reported symptoms, and real-time information dissemination to public health officials; and

(E) appropriate communications equipment and information technology to efficiently transmit information and data within national and regional health networks, including inexpensive, Internet-based Geographic Information Systems (GIS) for early recognition and diagnosis of diseases.

(8) An effective international capability to monitor and quickly diagnose infectious disease outbreaks will offer dividends not only in the event of biological weapons development, testing, production, attack, but also in the more likely cases of naturally occurring infectious disease outbreaks that could threaten the United States. Furthermore, a fast surveillance system will serve to deter terrorist

1 rorist use of biological weapons, as early detection  
2 will help mitigate the intended effects of such malev-  
3 olent uses.

4 (b) PURPOSE.—The purposes of this Act are as fol-  
5 lows:

6 (1) To enhance the capability of the inter-  
7 national community, through the World Health Or-  
8 ganization and individual countries, to detect, iden-  
9 tify, and contain infectious disease outbreaks, wheth-  
10 er the cause of those outbreaks is intentional human  
11 action or natural in origin.

12 (2) To enhance the training of public health  
13 professionals and epidemiologists from eligible devel-  
14 oping countries in advanced Internet-based syn-  
15 drome surveillance systems, in addition to traditional  
16 epidemiology methods, so that they may better de-  
17 tect, diagnose, and contain infectious disease out-  
18 breaks, especially those due to pathogens most likely  
19 to be used in a biological weapons attack.

20 (3) To provide assistance to developing coun-  
21 tries to purchase appropriate public health labora-  
22 tory equipment necessary for infectious disease sur-  
23 veillance and diagnosis.

24 (4) To provide assistance to developing coun-  
25 tries to purchase appropriate communications equip-

1       ment and information technology, including appropriate computer equipment and Internet connectivity  
2       mechanisms, to facilitate the exchange of Geographic  
3       Information Systems-based syndrome surveillance  
4       information and to effectively gather, analyze, and  
5       transmit public health information for infectious disease  
6       surveillance and diagnosis.

8               (5) To make available greater numbers of  
9       United States Government public health professionals  
10       to international health organizations, regional health networks, and United States diplomatic missions where appropriate.

13               (6) To establish “lab-to-lab” cooperative relationships between United States public health laboratories and established foreign counterparts.

16               (7) To expand the training and outreach activities of overseas United States laboratories, including Centers for Disease Control and Prevention and Department of Defense entities, to enhance the public health capabilities of developing countries.

21               (8) To provide appropriate technical assistance to existing regional health networks and, where appropriate, seed money for new regional networks.

24 **SEC. 3. DEFINITIONS.**

25       In this Act:

4 (A) has agreed to the objective of fully  
5 complying with requirements of the World  
6 Health Organization on reporting public health  
7 information on outbreaks of infectious diseases;

(B) has not been determined by the Secretary, for purposes of section 40 of the Arms Export Control Act (22 U.S.C. 2780), section 620A of the Foreign Assistance Act of 1961 (22 U.S.C. 2371), or section 6(j) of the Export Administration Act of 1979 (50 U.S.C. App. 2405), to have repeatedly provided support for acts of international terrorism, unless the Secretary exercises a waiver certifying that it is in the national interest of the United States to provide assistance under the provisions of this Act; and

20 (C) is a state party to the Biological  
21 Weapons Convention.

1       United States watch list, and who is not affiliated  
2       with any foreign terrorist organization.

1       ographic locators to track the emergence of a disease  
2       in a population.

3 **SEC. 4. PRIORITY FOR CERTAIN COUNTRIES.**

4       Priority in the provision of United States assistance  
5       for eligible developing countries under all the provisions  
6       of this Act shall be given to those countries that permit  
7       personnel from the World Health Organization and the  
8       Centers for Disease Control and Prevention to investigate  
9       outbreaks of infectious diseases on their territories.

10 **SEC. 5. RESTRICTION.**

11       Notwithstanding any other provision of this Act, no  
12       foreign nationals participating in programs authorized  
13       under this Act shall have access, during the course of such  
14       participation, to select agents that may be used as, or in,  
15       a biological weapon, except in a supervised and controlled  
16       setting.

17 **SEC. 6. FELLOWSHIP PROGRAM.**

18       (a) **ESTABLISHMENT.**—There is established a fellow-  
19       ship program (in this section referred to as the “pro-  
20       gram”) under which the Secretary, in consultation with  
21       the Secretary of Health and Human Services, and, subject  
22       to the availability of appropriations, award fellowships to  
23       eligible nationals of developing countries to pursue public  
24       health education or training, as follows:

17 (b) SPECIALIZATION IN BIOTERRORISM.—In addition  
18 to the education or training specified in subsection (a),  
19 each recipient of a fellowship under this section (in this  
20 section referred to as a “fellow”) may take courses of  
21 study at the Centers for Disease Control and Prevention  
22 or at an equivalent facility on diagnosis and containment  
23 of likely bioterrorism agents.

24 (c) FELLOWSHIP AGREEMENT.—

7 (A) will maintain satisfactory academic  
8 progress (as determined in accordance with reg-  
9 ulations issued by the Secretary and confirmed  
10 in regularly scheduled updates to the Secretary  
11 from the institution providing the education or  
12 training on the progress of the recipient's edu-  
13 cation or training);

14 (B) will, upon completion of such edu-  
15 cation or training, return to the recipient's  
16 country of nationality or last habitual residence  
17 (so long as it is an eligible developing country)  
18 and complete at least four years of employment  
19 in a public health position in the government or  
20 a nongovernmental, not-for-profit entity in that  
21 country or, with the approval of the Secretary  
22 and the government concerned, in an inter-  
23 national health organization; and

24 (C) agrees that, if the recipient is unable  
25 to meet the requirements described in subparagraph-

1                   graph (A) or (B), the recipient will reimburse  
2                   the United States for the value of the assist-  
3                   ance provided to the recipient under the fellow-  
4                   ship, together with interest at a rate deter-  
5                   mined in accordance with regulations issued by  
6                   the Secretary but not higher than the rate gen-  
7                   erally applied in connection with other Federal  
8                   loans.

9                   (2) WAIVERS.—The Secretary may waive the  
10                   application of paragraph (1)(B) and (1)(C) if the  
11                   Secretary determines that it is in the national inter-  
12                   est of the United States to do so.

13                   (d) IMPLEMENTATION.—The Secretary, in consulta-  
14                   tion with the Secretary of Health and Human Services,  
15                   is authorized to enter into an agreement with any eligible  
16                   developing country under which the developing country  
17                   agrees—

18                   (1) to establish a procedure for the nomination  
19                   of eligible nationals for fellowships under this sec-  
20                   tion;

21                   (2) to guarantee that a fellow will be offered a  
22                   professional public health position within the devel-  
23                   oping country upon completion of his studies; and

24                   (3) to certify to the Secretary when a fellow has  
25                   concluded the minimum period of employment in a

1 public health position required by the fellowship  
2 agreement, with an explanation of how the require-  
3 ment was met.

4 (e) PARTICIPATION OF UNITED STATES CITIZENS.—  
5 On a case-by-case basis, the Secretary may provide for the  
6 participation of United States citizens under the provi-  
7 sions of this section if the Secretary determines that it  
8 is in the national interest of the United States to do so.  
9 Upon completion of such education or training, a United  
10 States recipient shall complete at least five years of em-  
11 ployment in a public health position in an eligible devel-  
12 oping country or the World Health Organization.

## 13 SEC. 7. IN-COUNTRY TRAINING IN LABORATORY TECH- 14 NIQUES AND SYNDROME SURVEILLANCE.

(a) IN GENERAL.—In conjunction with the Centers for Disease Control and Prevention and the Department of Defense, the Secretary shall, subject to the availability of appropriations, support short training courses in-country (not in the United States) to laboratory technicians and other public health personnel (who are eligible persons) from developing countries in laboratory techniques relating to the identification, diagnosis, and tracking of pathogens responsible for possible infectious disease outbreaks. Training under this section may be conducted in overseas facilities of the Centers for Disease Control and

1 Prevention or in Overseas Medical Research Units of the  
2 Department of Defense, as appropriate. The Secretary  
3 shall coordinate such training courses, where appropriate,  
4 with the existing programs and activities of the World  
5 Health Organization.

6 (b) TRAINING IN SYNDROME SURVEILLANCE.—In  
7 conjunction with the Centers for Disease Control and Pre-  
8 vention and the Department of Defense, the Secretary  
9 shall, subject to the availability of appropriations, estab-  
10 lish and support short training courses in-country (not in  
11 the United States) for health care providers and other  
12 public health personnel from eligible developing countries  
13 in techniques of syndrome surveillance reporting and rapid  
14 analysis of syndrome information using Geographic Infor-  
15 mation System (GIS) tools. Training under this subsection  
16 may be conducted via the Internet or in appropriate facili-  
17 ties as determined by the Secretary. The Secretary shall  
18 coordinate such training courses, where appropriate, with  
19 the existing programs and activities of the World Health  
20 Organization.

21 **SEC. 8. ASSISTANCE FOR THE PURCHASE AND MAINTE-**  
22 **NANCE OF PUBLIC HEALTH LABORATORY**  
23 **EQUIPMENT.**

24 (a) AUTHORIZATION.—The President is authorized,  
25 on such terms and conditions as the President may deter-

1 mine, to furnish assistance to eligible developing countries  
2 to purchase and maintain public health laboratory equip-  
3 ment described in subsection (b).

4 (b) EQUIPMENT COVERED.—Equipment described in  
5 this subsection is equipment that is—

6 (1) appropriate, where possible, for use in the  
7 intended geographic area;

8 (2) necessary to collect, analyze, and identify  
9 expeditiously a broad array of pathogens, including  
10 mutant strains, which may cause disease outbreaks  
11 or may be used as a biological weapon;

12 (3) compatible with general standards set forth  
13 by the World Health Organization and, as appro-  
14 priate, the Centers for Disease Control and Preven-  
15 tion, to ensure interoperability with regional and  
16 international public health networks; and

17 (4) not defense articles, defense services, or  
18 training as defined under the Arms Export Control  
19 Act.

20 (c) RULE OF CONSTRUCTION.—Nothing in this sec-  
21 tion shall be construed to exempt the exporting of goods  
22 and technology from compliance with applicable provisions  
23 of the Export Administration Act of 1979 (or successor  
24 statutes).

1       (d) LIMITATION.—Amounts appropriated to carry  
2 out this section shall not be made available for the pur-  
3 chase from a foreign country of equipment that, if made  
4 in the United States, would be subject to the Arms Export  
5 Control Act or likely be barred or subject to special condi-  
6 tions under the Export Administration Act of 1979 (or  
7 successor statutes).

8       (e) PROCUREMENT PREFERENCE.—In the use of  
9 grant funds authorized under subsection (a), preference  
10 should be given to the purchase of equipment of United  
11 States manufacture. The use of amounts appropriated to  
12 carry out this section shall be subject to section 604 of  
13 the Foreign Assistance Act of 1961.

14       (f) HOST COUNTRY'S COMMITMENTS.—The assist-  
15 ance provided under this section shall be contingent upon  
16 the host country's commitment to provide the resources,  
17 infrastructure, and other assets required to house, main-  
18 tain, support, secure, and maximize use of this equipment  
19 and appropriate technical personnel.

20 **SEC. 9. ASSISTANCE FOR IMPROVED COMMUNICATION OF**  
21 **PUBLIC HEALTH INFORMATION.**

22       (a) ASSISTANCE FOR PURCHASE OF COMMUNICATION  
23 EQUIPMENT AND INFORMATION TECHNOLOGY.—The  
24 President is authorized to provide, on such terms and con-  
25 ditions as the President may determine, assistance to eligi-

1 ble developing countries for the purchase and maintenance  
2 of communications equipment and information technology  
3 described in subsection (b), and supporting equipment,  
4 necessary to effectively collect, analyze, and transmit pub-  
5 lic health information.

6 (b) COVERED EQUIPMENT.—Equipment described in  
7 this subsection is equipment that—

8 (1) is suitable for use under the particular con-  
9 ditions of the area of intended use;

10 (2) meets appropriate World Health Organiza-  
11 tion standards to ensure interoperability with like  
12 equipment of other countries and international orga-  
13 nizations; and

14 (3) is not defense articles, defense services, or  
15 training as defined under the Arms Export Control  
16 Act.

17 (c) RULE OF CONSTRUCTION.—Nothing in this sec-  
18 tion shall be construed to exempt the exporting of goods  
19 and technology from compliance with applicable provisions  
20 of the Export Administration Act of 1979 (or successor  
21 statutes).

22 (d) LIMITATION.—Amounts appropriated to carry  
23 out this section shall not be made available for the pur-  
24 chase from a foreign country of equipment that, if made  
25 in the United States, would be subject to the Arms Export

1 Control Act or likely be barred or subject to special condi-  
2 tions under the Export Administration Act of 1979 (or  
3 successor statutes).

4 (e) PROCUREMENT PREFERENCE.—In the use of  
5 grant funds under subsection (a), preference should be  
6 given to the purchase of communications (and information  
7 technology) equipment of United States manufacture. The  
8 use of amounts appropriated to carry out this section shall  
9 be subject to section 604 of the Foreign Assistance Act  
10 of 1961.

11 (f) ASSISTANCE FOR STANDARDIZATION OF REPORT-  
12 ING.—The President is authorized to provide, on such  
13 terms and conditions as the President may determine,  
14 technical assistance and grant assistance to international  
15 health organizations (including regional international  
16 health organizations) to facilitate standardization in the  
17 reporting of public health information between and among  
18 developing countries and international health organiza-  
19 tions.

20 (g) HOST COUNTRY'S COMMITMENTS.—The assist-  
21 ance provided under this section shall be contingent upon  
22 the host country's commitment to provide the resources,  
23 infrastructure, and other assets required to house, sup-  
24 port, maintain, secure, and maximize use of this equip-  
25 ment and appropriate technical personnel.

1    **SEC. 10. ASSIGNMENT OF PUBLIC HEALTH PERSONNEL TO**  
2                   **UNITED STATES MISSIONS AND INTER-**  
3                   **NATIONAL ORGANIZATIONS.**

4        (a) **IN GENERAL.**—Upon the request of a United  
5    States chief of diplomatic mission or an international  
6    health organization, and with the concurrence of the Sec-  
7    retary of State, the head of a Federal agency may assign  
8    to the respective United States mission or organization  
9    any officer or employee of the agency occupying a public  
10   health position within the agency for the purpose of en-  
11   hancing disease and pathogen surveillance efforts in devel-  
12   oping countries.

13       (b) **REIMBURSEMENT.**—The costs incurred by a Fed-  
14   eral agency by reason of the detail of personnel under sub-  
15   section (a) may be reimbursed to that agency out of the  
16   applicable appropriations account of the Department of  
17   State if the Secretary determines that the relevant agency  
18   may otherwise be unable to assign such personnel on a  
19   non-reimbursable basis.

20   **SEC. 11. LABORATORY-TO-LABORATORY EXCHANGE PRO-**  
21                   **GRAM.**

22       (a) **AUTHORITY.**—The head of a Federal agency, with  
23   the concurrence of the Secretary, is authorized to provide  
24   by grant, contract, or otherwise for educational exchanges  
25   by financing educational activities—

1 (1) of United States public health personnel in  
2 approved public health and research laboratories in  
3 eligible developing countries; and

4 (2) of public health personnel of eligible developing countries in United States public health and  
5 research laboratories.

7 (b) APPROVED PUBLIC HEALTH LABORATORIES DE-  
8 FINED.—In this section, the term “approved public health  
9 and research laboratories” means non-United States Gov-  
10 ernment affiliated public health laboratories that the Sec-  
11 retary determines are well-established and have a dem-  
12 onstrated record of excellence.

13 SEC. 12. EXPANSION OF CERTAIN UNITED STATES GOVERN-  
14 MENT LABORATORIES ABROAD.

15 (a) IN GENERAL.—Subject to the availability of ap-  
16 propriations, the Centers for Disease Control and Preven-  
17 tion and the Department of Defense shall each—

23 (2) expand the operations of those laboratories,  
24 especially with respect to the implementation of on-

1 site training of foreign nationals and activities af-  
2 fecting neighboring countries.

3 (b) COOPERATION AND COORDINATION BETWEEN  
4 LABORATORIES.—Subsection (a) shall be carried out in  
5 such a manner as to foster cooperation and avoid dupli-  
6 cation between and among laboratories.

7 (c) RELATION TO CORE MISSIONS AND SECURITY.—  
8 The expansion of the operations of overseas laboratories  
9 of the Centers or the Department under this section shall  
10 not—

11 (1) detract from the established core missions  
12 of the laboratories; or  
13 (2) compromise the security of those labora-  
14 tories, as well as their research, equipment, exper-  
15 tise, and materials.

16 **SEC. 13. ASSISTANCE FOR REGIONAL HEALTH NETWORKS**  
17 **AND EXPANSION OF FOREIGN EPIDE-**  
18 **MOLOGY TRAINING PROGRAMS.**

19 (a) AUTHORITY.—The President is authorized, on  
20 such terms and conditions as the President may deter-  
21 mine, to provide assistance for the purposes of—

22 (1) enhancing the surveillance and reporting ca-  
23 pabilities for the World Health Organization and ex-  
24 isting regional health networks; and  
25 (2) developing new regional health networks.

1       (b) EXPANSION OF FOREIGN EPIDEMIOLOGY TRAIN-  
2   ING PROGRAMS.—The Secretary of Health and Human  
3   Services is authorized to establish new country or regional  
4   Foreign Epidemiology Training Programs in eligible devel-  
5   oping countries.

6 **SEC. 14. AUTHORIZATION OF APPROPRIATIONS.**

7       (a) AUTHORIZATION OF APPROPRIATIONS.—

8           (1) IN GENERAL.—Subject to subsection (c),  
9   there are authorized to be appropriated \$70,000,000  
10   for the fiscal year 2003 and \$80,000,000 for fiscal  
11   year 2004, to carry out this Act.

12           (2) ALLOCATION OF FUNDS.—Of the amounts  
13   made available under paragraph (1)—

14               (A) \$50,000,000 for the fiscal year 2003  
15   and \$50,000,000 for the fiscal year 2004 are  
16   authorized to be available to carry out sections  
17   6, 7, 8, and 9;

18               (B) not more than \$2,000,000 shall be  
19   available for each of the fiscal years 2003 and  
20   2004 for the specific training programs author-  
21   ized in section 6, of which not more than  
22   \$500,000 shall be available to carry out sub-  
23   section (a)(1) of such section and not more  
24   than \$1,500,000 shall be available to carry out  
25   subsection (a)(2) of such section;

1 (C) \$5,000,000 for the fiscal year 2003  
2 and \$5,000,000 for the fiscal year 2004 are au-  
3 thorized to be available to carry out section 10;

4 (D) \$2,000,000 for the fiscal year 2003  
5 and \$2,000,000 for the fiscal year 2004 are au-  
6 thorized to be available to carry out section 11;

11 (F) \$5,000,000 for the fiscal year 2003  
12 and \$5,000,000 for the fiscal year 2004 are au-  
13 thorized to be available to carry out section 13.

14 (b) AVAILABILITY OF FUNDS.—The amount appro-  
15 priated pursuant to subsection (a) is authorized to remain  
16 available until expended.

17 (c) REPORTING REQUIREMENT.—

23 (A) a description of the implementation of  
24 programs under this Act; and

1 (B) an estimate of the level of funding re-  
2 quired to carry out those programs at a suffi-  
3 cient level.