S. 823

To amend the Public Health Service Act with respect to facilitating the development of microbicides for preventing transmission of HIV/AIDS and other diseases, and for other purposes.

IN THE SENATE OF THE UNITED STATES

March 8, 2007

Mr. Obama (for himself, Ms. Snowe, Mr. Durbin, Mr. Dodd, Mrs. Clinton, Mrs. Boxer, Mr. Schumer, and Mr. Kerry) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

A BILL

To amend the Public Health Service Act with respect to facilitating the development of microbicides for preventing transmission of HIV/AIDS and other diseases, 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 "Microbicide Develop-
- 5 ment Act".
- 6 SEC. 2. FINDINGS.
- 7 Congress makes the following findings:

- 1 (1) Women and girls are the new face of HIV/
 2 AIDS, and are increasingly affected by the disease
 3 in every region of the world. As of 2006, nearly half
 4 of the 37,200,000 adults living with HIV and AIDS
 5 worldwide were women. In sub-Saharan Africa, that
 6 proportion was 59 percent.
 - (2) Because of their social and biological vulnerabilities, young women are particularly at risk of HIV infection. In sub-Saharan Africa, the prevalence of HIV/AIDS is three times higher among women ages 15 to 24 than it is among men in that same age group.
 - (3) Women infected with HIV can transmit the infection to their infants during pregnancy, labor, delivery, or breast-feeding. The most effective way to interrupt mother-to-child transmission is to ensure that mothers are not infected in the first place.
 - (4) Many women who become infected with HIV have just one sexual partner—their husband. Marriage is not necessarily effective protection against HIV, because to protect themselves from HIV, women have to rely on their male partners to be faithful or to use condoms. Many women, especially in the developing world, are unable to insist on

- mutual monogamy or negotiate condom use, particu larly in long-term relationships.
 - (5) Scientists are working on a promising new prevention tool that could slow down the spread of the HIV/AIDS epidemic—microbicides. Formulated as gels, creams, tablets or rings, microbicides are being designed to stop the transmission of the pathogens that cause AIDS and other sexually transmitted infections (referred to in this section as "STIs"). Microbicides could allow a woman to protect herself from disease.
 - (6) Couples need a method of HIV protection that will allow them to conceive a child and start a family. No existing HIV prevention method also allows conception. Some microbicides in development may allow women to become pregnant while at the same time protecting them from infection.
 - (7) According to UNICEF, worldwide, the lack of HIV/AIDS prevention and treatment has left over 15,000,000 children as orphans. Of these, more than 12,000,000 live in sub-Saharan Africa. The number of AIDS orphans in sub-Saharan Africa alone is expected to grow to nearly 16,000,000 by 2010.
 - (8) HIV prevention tools like microbicides could also be valuable for women in the United States,

who account for an increasing proportion of new HIV and AIDS cases among Americans. Minority women in the United States are particularly affected. Both African-American and Latina women account for a disproportionate number of new AIDS cases, and HIV/AIDS was the leading cause of death in 2002 for African-American women ages 25 to 34.

- (9) With nearly 20,000,000 new cases of sexually transmitted infections occurring every year, the United States has the highest STI rates of any industrialized nation. Like HIV, STIs pose significant health threats and costs, with young people and women bearing a disproportionate burden. Nearly half of new STI cases each year occur in people under 25 years of age with women both more vulnerable to infection and more likely to experience serious and lasting health consequences when they do become infected. Some microbicides could help prevent STIs.
- (10) HIV/AIDS threatens national and global security. Beyond its burdens on individuals, families, and communities, the pandemic reduces economic growth, decimates health budgets, undermines civil society, and burdens the armed forces of many nations, including the United States military.

- (11) The microbicide field has gained considerable scientific momentum. Several first-generation products are in large-scale human trials to measure effectiveness, and new products based on recent advances in HIV treatment are well into safety trials.
- (12) Microbicides are a public health good with potential for large social benefits but limited economic incentives for private investment, so that public funding is required to fill the gap. As is the case for vaccines and other public goods, microbicide development must depend heavily on government leadership and investment.
- strong commitment to microbicide research and development. Three agencies, the National Institutes of Health, Centers for Disease Control and Prevention, and United States Agency for International Development, have played important roles in the progress to date, and each makes a valuable and unique contribution. As the primary federal agency for conducting and supporting medical research and the largest single Federal Government contributor to microbicide research, the National Institutes of Health supports the Microbicide Trials Network as well as other important research activities. The

United States Agency for International Development sustains strong partnerships with public and private organizations working on microbicide research, including trials in developing countries where its experience is extensive, and is well positioned to facilitate introduction of microbicides once available. The Centers for Disease Control and Prevention has a long history of conducting field trials in developing countries, but the extent of its current engagement remains quite limited.

(14) According to the National Institutes of Health's strategic plan, microbicides may provide "one of the most promising primary preventative interventions that could be safe, effective, readily available, affordable, and widely acceptable." In a recent report to Congress, the United States Agency for International Development states that "the US government is firmly committed to accelerating the development of safe and effective microbicides to prevent HIV." In addition, the President's Emergency Plan for AIDS Relief recognizes the urgency of developing safe and effective microbicides.

(15) The National Institutes of Health, United States Agency for International Development, and the Centers for Disease Control and Prevention have

| 1 | expanded their microbicide portfolios, but overall |
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| 2 | Federal leadership and coordination is required to |
| 3 | eliminate costly inefficiencies and unproductive du- |
| 4 | plication of effort. |
| 5 | (16) HIV prevention options available as of |
| 6 | 2006 are insufficient in general. Most critically, they |
| 7 | fail to recognize women's particular needs and |
| 8 | vulnerabilities. If women are to have a genuine op- |
| 9 | portunity to protect themselves, their best option is |
| 10 | the rapid development of new HIV-prevention tech- |
| 11 | nologies like microbicides, which women can initiate. |
| 12 | TITLE I—MICROBICIDE RE- |
| 13 | SEARCH AT THE NATIONAL |
| 14 | INSTITUTES OF HEALTH |
| 15 | SEC. 101. OFFICE OF AIDS RESEARCH; PROGRAM REGARD- |
| 16 | |
| | ING MICROBICIDES FOR PREVENTING TRANS- |
| 17 | ING MICROBICIDES FOR PREVENTING TRANS- MISSION OF HIV/AIDS AND OTHER DISEASES. |
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| 17 | MISSION OF HIV/AIDS AND OTHER DISEASES. |
| 17 18 | MISSION OF HIV/AIDS AND OTHER DISEASES. Subpart I of part D of title XXIII of the Public |
| 17 18 19 | MISSION OF HIV/AIDS AND OTHER DISEASES. Subpart I of part D of title XXIII of the Public Health Service Act (42 U.S.C. 300cc-40 et seq.) is |
| 17 18 19 20 | MISSION OF HIV/AIDS AND OTHER DISEASES. Subpart I of part D of title XXIII of the Public Health Service Act (42 U.S.C. 300cc-40 et seq.) is amended by inserting after section 2351 the following: |
| 17 18 19 20 21 | MISSION OF HIV/AIDS AND OTHER DISEASES. Subpart I of part D of title XXIII of the Public Health Service Act (42 U.S.C. 300cc-40 et seq.) is amended by inserting after section 2351 the following: "SEC. 2351A. MICROBICIDES FOR PREVENTING TRANS- |
| 17 18 19 20 21 22 | MISSION OF HIV/AIDS AND OTHER DISEASES. Subpart I of part D of title XXIII of the Public Health Service Act (42 U.S.C. 300cc–40 et seq.) is amended by inserting after section 2351 the following: "SEC. 2351A. MICROBICIDES FOR PREVENTING TRANSMISSION OF HIV/AIDS AND OTHER DISEASES. |

| 1 | "(A) expedite the implementation of Fed- |
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| 2 | eral strategic plans for the conduct and support |
| 3 | of microbicide research and development; and |
| 4 | "(B) annually review and, as appropriate, |
| 5 | revise such plan, to prioritize funding and ac- |
| 6 | tivities in terms of their scientific urgency. |
| 7 | "(2) Coordination.—In implementing, review- |
| 8 | ing, and prioritizing elements of the plan described |
| 9 | under paragraph (1), the Director of the Office of |
| 10 | AIDS Research shall coordinate with— |
| 11 | "(A) other Federal agencies, including the |
| 12 | Director of the Centers for Disease Control and |
| 13 | Prevention and the Administrator of the United |
| 14 | States Agency for International Development, |
| 15 | involved in microbicide research; |
| 16 | "(B) the microbicide research and develop- |
| 17 | ment community; and |
| 18 | "(C) health advocates. |
| 19 | "(b) Expansion and Coordination of Activi- |
| 20 | TIES.—The Director of the Office of AIDS Research, act- |
| 21 | ing in coordination with relevant institutes and offices, |
| 22 | shall expand, intensify, and coordinate the activities of all |
| 23 | appropriate institutes and components of the National In- |
| 24 | stitutes of Health with respect to research and develop- |
| 25 | ment of microbicides to prevent the transmission of the |

- 1 human immunodeficiency virus ('HIV') and other sexually
- 2 transmitted infections.
- 3 "(c) Microbicide Development Branch.—In car-
- 4 rying out subsection (b), the Director of the National In-
- 5 stitute of Allergy and Infectious Diseases shall establish
- 6 within the Division of AIDS in the Institute, a clearly de-
- 7 fined organizational branch charged with carrying out
- 8 microbicide research and development. In establishing
- 9 such branch, the Director shall ensure that there are a
- 10 sufficient number of employees dedicated to carrying out
- 11 its mission.
- 12 "(d) MICROBICIDE CLINICAL TRIALS.—In carrying
- 13 out subsection (c), the Director of the National Institute
- 14 of Allergy and Infectious Diseases shall assign priority to
- 15 ensuring adequate funding and support for the
- 16 Microbicide Trials Network and other programs for sup-
- 17 porting microbicides clinical trials, with particular empha-
- 18 sis on implementation of trials leading to product licen-
- 19 sure.
- 20 "(e) Reports to Congress.—
- 21 "(1) IN GENERAL.—Not later than 6 months
- after the date of enactment of the Microbicide De-
- velopment Act, and annually thereafter, the Director
- of the Office of AIDS Research shall submit to the
- appropriate committees of Congress a report that

| 1 | describes the strategies being implemented by the |
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| 2 | Federal Government regarding microbicide research |
| 3 | and development. |
| 4 | "(2) Contents of Reports.—Each report |
| 5 | submitted under paragraph (1) shall include— |
| 6 | "(A) a description of activities with respect |
| 7 | to microbicide research and development con- |
| 8 | ducted and supported by the Federal Govern- |
| 9 | ment; |
| 10 | "(B) a summary and analysis of the ex- |
| 11 | penditures made by the Director of the Office |
| 12 | of AIDS Research during the preceding year |
| 13 | for activities with respect to microbicide-specific |
| 14 | research and development, including basic re- |
| 15 | search, preclinical product development, clinical |
| 16 | trials, and behavioral science; and |
| 17 | "(C) a description and evaluation of the |
| 18 | progress made, during the preceding year, to- |
| 19 | ward the development of effective microbicides. |
| 20 | "(3) Appropriate committees of congress |
| 21 | DEFINED.—In this subsection, the term 'appropriate |
| 22 | committees of Congress' means the Committee on |
| 23 | Health, Education, Labor, and Pensions and the |
| 24 | Committee on Appropriations of the Senate and the |
| 25 | Committee on Energy and Commerce and the Com- |

| 1 | mittee on Appropriations of the House of Represent- |
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| 2 | atives. |
| 3 | "(f) Authorization of Appropriations.—There |
| 4 | are authorized to be appropriated such sums as may be |
| 5 | necessary for each fiscal year to carry out this section.". |
| 6 | TITLE II—MICROBICIDE RE- |
| 7 | SEARCH AT THE CENTERS |
| 8 | FOR DISEASE CONTROL AND |
| 9 | PREVENTION |
| 10 | SEC. 201. MICROBICIDES FOR PREVENTING TRANSMISSION |
| 11 | OF HIV/AIDS AND OTHER DISEASES. |
| 12 | Part B of title III of the Public Health Service Act |
| 13 | (42 U.S.C. 243 et seq.) is amended— |
| 14 | (1) by transferring section 317R so as to ap- |
| 15 | pear after section 317Q; and |
| 16 | (2) by inserting after section 317R (as so trans- |
| 17 | ferred) the following: |
| 18 | "SEC. 371S. MICROBICIDES FOR PREVENTING TRANS- |
| 19 | MISSION OF HIV/AIDS AND OTHER DISEASES. |
| 20 | "(a) Development and Implementation of the |
| 21 | CENTERS FOR DISEASE CONTROL AND PREVENTION'S |
| 22 | MICROBICIDE AGENDA.—The Director of the Centers for |
| 23 | Disease Control and Prevention shall fully implement such |
| 24 | Centers' microbicide agenda to support microbicide re- |
| 25 | search and development. Such an agenda shall include— |

- "(1) conducting laboratory research in preparation for, and support of, clinical microbicide trials;
 and
- 4 "(2) conducting behavioral research in prepara-5 tion for, and support of, clinical microbicide trials.
- 6 "(b) Personnel.—The Centers for Disease Control
- 7 and Prevention shall ensure that there are sufficient num-
- 8 bers of dedicated employees for carrying out the
- 9 microbicide agenda under subsection (a).
- 10 "(c) Report to Congress.—
- 11 "(1) IN GENERAL.—Not later than 1 year after 12 the date of enactment of the Microbicide Develop-13 ment Act, and annually thereafter, the Director of 14 the Centers for Disease Control and Prevention shall 15 submit to the appropriate committees of Congress, a 16 report on the strategies being implemented by the 17 Centers for Disease Control and Prevention with re-18 spect to microbicide research and development. Such 19 report shall be submitted alone or as part of the 20 overall Federal strategic plan on microbicides com-21 piled annually by the National Institutes of Health 22 Office of AIDS Research as required under section
- 24 "(2) CONTENTS OF REPORT.—Such report shall
 25 include—

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| 1 | "(A) a description of activities with respect |
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| 2 | to microbicides conducted or supported by the |
| 3 | Director of the Centers for Disease Control and |
| 4 | Prevention; |
| 5 | "(B) a summary and analysis of the ex- |
| 6 | penditures made by such Director during the |
| 7 | preceding year, for activities with respect to |
| 8 | microbicide-specific research and development, |
| 9 | including the number of employees of such Cen- |
| 10 | ters involved in such activities; and |
| 11 | "(C) a description and evaluation of the |
| 12 | progress made, during the preceding year, to- |
| 13 | ward the development of effective microbicides. |
| 14 | "(3) Appropriate committees of congress |
| 15 | DEFINED.—For the purposes of this subsection, the |
| 16 | term 'appropriate committees of Congress' means |
| 17 | the Committee on Health, Education, Labor, and |
| 18 | Pensions and the Committee on Appropriations of |
| 19 | the Senate and the Committee on Energy and Com- |
| 20 | merce and the Committee on Appropriations of the |
| 21 | House of Representatives. |
| 22 | "(d) AUTHORIZATION OF APPROPRIATIONS.—There |
| 23 | are authorized to be appropriated such sums as may be |
| 24 | necessary for each fiscal year to carry out this section.". |

| 1 | TITLE III—MICROBICIDE RE- |
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| 2 | SEARCH AND DEVELOPMENT |
| 3 | AT THE UNITED STATES |
| 4 | AGENCY FOR INTER- |
| 5 | NATIONAL DEVELOPMENT |
| 6 | SEC. 301. MICROBICIDES FOR PREVENTING TRANSMISSION |
| 7 | OF HIV/AIDS AND OTHER DISEASES. |
| 8 | Section 104A of the Foreign Assistance Act of 1961 |
| 9 | (22 U.S.C. 2151b-2) is amended by adding at the end |
| 10 | the following new subsection: |
| 11 | "(h) Microbicides for Preventing Trans- |
| 12 | MISSION OF HIV/AIDS AND OTHER DISEASES.— |
| 13 | "(1) Development and implementation of |
| 14 | THE MICROBICIDE AGENDA.—The head of the Office |
| 15 | of HIV/AIDS of the United States Agency for Inter- |
| 16 | national Development, in conjunction with other of- |
| 17 | fices of such Agency, shall develop and implement a |
| 18 | program to support the development of microbicides |
| 19 | for the prevention of the transmission of HIV/AIDS |
| 20 | and other diseases, and facilitate wide-scale avail- |
| 21 | ability of such products after such development. |
| 22 | "(2) Staffing.—The head of the Office of |
| 23 | HIV/AIDS shall ensure that the Agency has a suffi- |
| 24 | cient number of dedicated employees to carry out the |
| 25 | microbicide agenda. |

| 1 | "(3) Reports to congress.— |
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| 2 | "(A) IN GENERAL.—Not later than 1 year |
| 3 | after the date of enactment of the Microbicide |
| 4 | Development Act, and annually thereafter, the |
| 5 | Administrator of the Agency shall submit to the |
| 6 | appropriate committees of Congress a report on |
| 7 | the activities of the Administrator to carry out |
| 8 | the microbicide agenda and on any other activi- |
| 9 | ties carried out by the Administrator related to |
| 10 | microbicide research and development. |
| 11 | "(B) Contents of Report.—Each report |
| 12 | submitted under subparagraph (A) shall in- |
| 13 | clude— |
| 14 | "(i) a description of activities with re- |
| 15 | spect to microbicides conducted or sup- |
| 16 | ported by the Administrator; |
| 17 | "(ii) a summary and analysis of the |
| 18 | expenditures made by the Administrator |
| 19 | during the preceding year for activities |
| 20 | with respect to microbicide-specific re- |
| 21 | search and development, including the |
| 22 | number of employees of the Agency who |
| 23 | are involved in such activities; and |
| 24 | "(iii) a description and evaluation of |
| 25 | the progress made during the preceding |

| 1 | year toward the development of effective |
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| 2 | microbicides, including activities in support |
| 3 | of eventual product access. |
| 4 | "(C) Consultation.—The Administrator |
| 5 | shall consult with the Director of the Office of |
| 6 | AIDS Research of the National Institutes of |
| 7 | Health in preparing a report required by sub- |
| 8 | paragraph (A). |
| 9 | "(D) Appropriate committees of con- |
| 10 | GRESS DEFINED.—In this paragraph, the term |
| 11 | 'appropriate committees of Congress' means the |
| 12 | Committee on Foreign Relations and the Com- |
| 13 | mittee on Appropriations of the Senate and the |
| 14 | Committee on Foreign Affairs and the Com- |
| 15 | mittee on Appropriations of the House of Rep- |
| 16 | resentatives. |
| 17 | "(4) Authorization of appropriations.— |
| 18 | There are authorized to be appropriated such sums |
| 19 | as may be necessary for each fiscal year to carry out |
| | |

this subsection.".

1 TITLE IV—ADVANCE MARKET 2 COMMITMENTS

| AS INCENTIVES FOR MICROBICIDE DEVELORS MENT. (a) REPORT.—Not later than 180 days after the days of the enactment of this Act, the Secretary of State shall submit to the appropriate committees of Congress a report on the feasibility and impediments to the Government the United States entering into advanced market committees of microbicides to prevent HIV infection as a mean of creating incentives for the private sector to invest research, development, and manufacturing microbicides. | 2 | COMMITMENTS |
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| MENT. (a) Report.—Not later than 180 days after the days of the enactment of this Act, the Secretary of State shall submit to the appropriate committees of Congress a report on the feasibility and impediments to the Government the United States entering into advanced market committees of microbicides to prevent HIV infection as a mean of creating incentives for the private sector to invest research, development, and manufacturing microbicides. (b) Appropriate Committees of Congress Defined.—In this section, the term "appropriate committees" | 3 | SEC. 401. REPORT ON ADVANCE MARKET COMMITMENTS |
| 6 (a) Report.—Not later than 180 days after the days of the enactment of this Act, the Secretary of State shall submit to the appropriate committees of Congress a report of the feasibility and impediments to the Government the United States entering into advanced market committees of microbicides to prevent HIV infection as a mean of creating incentives for the private sector to invest research, development, and manufacturing microbicides. (b) Appropriate Committees of Congress Difference for the private sector to invest microbicides. | 4 | AS INCENTIVES FOR MICROBICIDE DEVELOP |
| of the enactment of this Act, the Secretary of State she submit to the appropriate committees of Congress a report on the feasibility and impediments to the Government the United States entering into advanced market committees of microbicides to prevent HIV infection as a mea of creating incentives for the private sector to invest research, development, and manufacturing microbicides. (b) Appropriate Committees of Congress D fined.—In this section, the term "appropriate committees committees" | 5 | MENT. |
| 8 submit to the appropriate committees of Congress a report on the feasibility and impediments to the Government the United States entering into advanced market committees of microbicides to prevent HIV infection as a mea of creating incentives for the private sector to invest research, development, and manufacturing microbicides. (b) Appropriate Committees of Congress D Fined.—In this section, the term "appropriate committees committees" | 6 | (a) Report.—Not later than 180 days after the date |
| 9 on the feasibility and impediments to the Government 10 the United States entering into advanced market comm 11 ments of microbicides to prevent HIV infection as a mea 12 of creating incentives for the private sector to invest 13 research, development, and manufacturing 14 microbicides. 15 (b) Appropriate Committees of Congress D 16 FINED.—In this section, the term "appropriate comm | 7 | of the enactment of this Act, the Secretary of State shall |
| the United States entering into advanced market comm ments of microbicides to prevent HIV infection as a mea of creating incentives for the private sector to invest research, development, and manufacturing microbicides. (b) Appropriate Committees of Congress D fined.—In this section, the term "appropriate comm | 8 | submit to the appropriate committees of Congress a report |
| ments of microbicides to prevent HIV infection as a mea of creating incentives for the private sector to invest research, development, and manufacturing microbicides. (b) Appropriate Committees of Congress D fined.—In this section, the term "appropriate comm | 9 | on the feasibility and impediments to the Government of |
| of creating incentives for the private sector to invest research, development, and manufacturing microbicides. (b) Appropriate Committees of Congress D Fined.—In this section, the term "appropriate comm | 10 | the United States entering into advanced market commit- |
| 13 research, development, and manufacturing 14 microbicides. 15 (b) Appropriate Committees of Congress D 16 FINED.—In this section, the term "appropriate comm | 11 | ments of microbicides to prevent HIV infection as a means |
| microbicides. (b) APPROPRIATE COMMITTEES OF CONGRESS D FINED.—In this section, the term "appropriate comm | 12 | of creating incentives for the private sector to invest in |
| 15 (b) Appropriate Committees of Congress D 16 Fined.—In this section, the term "appropriate comm | 13 | research, development, and manufacturing of |
| 16 FINED.—In this section, the term "appropriate comm | 14 | microbicides. |
| , | 15 | (b) Appropriate Committees of Congress De- |
| 17 tees of Congress" means the Committee on Health, Ed | 16 | FINED.—In this section, the term "appropriate commit- |
| | 17 | tees of Congress" means the Committee on Health, Edu- |

20 ergy and Commerce and the Committee on Foreign Affairs

cation, Labor, and Pensions and the Committee on For-

eign Relations of the Senate, and the Committee on En-

 $21\,\,$ of the House of Representatives.

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