

112TH CONGRESS  
1ST SESSION

# S. 1167

To amend the Public Health Service Act to improve the diagnosis and treatment of hereditary hemorrhagic telangiectasia, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

JUNE 9, 2011

Mr. JOHNSON of South Dakota (for himself and Mr. BINGAMAN) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

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## A BILL

To amend the Public Health Service Act to improve the diagnosis and treatment of hereditary hemorrhagic telangiectasia, 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 “Hereditary Hemor-  
5 rhagic Telangiectasia Diagnosis and Treatment Act of  
6 2011”.

7 **SEC. 2. FINDINGS.**

8 The Congress finds as follows:

1           (1) Hereditary hemorrhagic telangiectasia  
2           (“HHT”) is a largely undiagnosed or misdiagnosed  
3           vascular genetic bleeding disorder that causes abnor-  
4           malities of the blood vessels. A person with HHT  
5           has the tendency to form blood vessels that lack the  
6           capillaries between an artery and vein. HHT can  
7           cause spontaneous hemorrhage or stroke when brain  
8           or lung arteriovenous malformations, which are tan-  
9           gled blood vessels, rupture unexpectedly in all age  
10          groups. In addition to hemorrhagic stroke, embolic  
11          stroke, and brain abscess occur in approximately 30  
12          percent of individuals with HHT caused by artery-  
13          vein malformations in the lung (due to lack of cap-  
14          illaries between the arterial and venous systems  
15          which prevent or normally filter out clots and bac-  
16          teria), causing disability and sudden premature  
17          death.

18          (2) One in 5,000 American children and adults  
19          suffer from HHT.

20          (3) Studies have found an increase in morbidity  
21          and mortality rate for individuals who suffer from  
22          HHT.

23          (4) Due to the widespread lack of knowledge,  
24          accurate diagnosis, and appropriate intervention, 90  
25          percent of HHT-affected families are at risk for pre-

1 ventable life-threatening and disabling medical inci-  
2 dents such as stroke.

3 (5) Early detection, screening, and treatment  
4 can prevent premature deaths, spontaneous hemor-  
5 rhage, hemorrhagic stroke, embolic stroke, brain ab-  
6 scess, and other long-term health care complications  
7 resulting from HHT.

8 (6) HHT is an important health condition with  
9 serious health consequences which are amenable to  
10 early identification and diagnosis with suitable tests,  
11 and acceptable and available treatments in estab-  
12 lished treatment centers.

13 (7) Timely identification and management of  
14 HHT cases is an important public health objective  
15 because it will save lives, prevent disability, and re-  
16 duce direct and indirect health care costs expendi-  
17 tures.

18 (8) Without a new program for early detection,  
19 screening, and treatment, 14,000 children and  
20 adults who suffer from HHT in the population today  
21 will suffer premature death and disability.

22 **SEC. 3. PURPOSE.**

23 The purpose of this Act is to create a federally led  
24 and financed initiative for early diagnosis and appropriate  
25 treatment of hereditary hemorrhagic telangiectasia that

1 will result in the reduction of the suffering of families,  
2 prevent premature death and disability, and lower health  
3 care costs through proven treatment interventions.

4 **SEC. 4. NATIONAL INSTITUTES OF HEALTH.**

5 Part B of title IV of the Public Health Service Act  
6 (42 U.S.C. 284 et seq.) is amended by adding at the end  
7 the following:

8 **“SEC. 409K. HEREDITARY HEMORRHAGIC TELANGIECTASIA.**

9 “(a) HHT INITIATIVE.—

10 “(1) ESTABLISHMENT.—The Secretary shall es-  
11 tablish and implement an HHT initiative to assist in  
12 coordinating activities to improve early detection,  
13 screening, and treatment of people who suffer from  
14 HHT. Such initiative shall focus on—

15 “(A) advancing research on the causes, di-  
16 agnosis, and treatment of HHT, including  
17 through the conduct or support of such re-  
18 search; and

19 “(B) increasing physician and public  
20 awareness of HHT.

21 “(2) CONSULTATION.—In carrying out this sub-  
22 section, the Secretary shall consult with the Director  
23 of the National Institutes of Health and the Director  
24 of the Centers for Disease Control and Prevention.

25 “(b) HHT COORDINATING COMMITTEE.—

1           “(1) ESTABLISHMENT.—Not later than 60 days  
2 after the date of the enactment of this section, the  
3 Secretary, in consultation with the Director of the  
4 National Institutes of Health, shall establish a com-  
5 mittee to be known as the HHT Coordinating Com-  
6 mittee.

7           “(2) MEMBERSHIP.—

8           “(A) IN GENERAL.—The members of the  
9 Committee shall be appointed by the Secretary,  
10 in consultation with the Director of the Na-  
11 tional Institutes of Health, and shall consist of  
12 12 individuals who are experts in HHT or  
13 arteriovenous malformation (AVM) as follows:

14           “(i) Four representatives of HHT  
15 Treatment Centers of Excellence des-  
16 igned under section 317U(c)(1).

17           “(ii) Four experts in vascular, molec-  
18 ular, or basic science.

19           “(iii) Four representatives of the Na-  
20 tional Institutes of Health.

21           “(B) CHAIR.—The Secretary shall des-  
22 ignate the Chair of the Committee from among  
23 its members.

24           “(C) INTERIM MEMBERS.—In place of the  
25 4 members otherwise required to be appointed

1 under paragraph (2)(A)(i), the Secretary may  
2 appoint 4 experts in vascular, molecular, or  
3 basic science to serve as members of the Com-  
4 mittee during the period preceding designation  
5 and establishment of HHT Treatment Centers  
6 of Excellence under section 317U.

7 “(D) PUBLICATION OF NAMES.—Not later  
8 than 30 days after the establishment of the  
9 Committee, the Secretary shall publish the  
10 names of the Chair and members of the Com-  
11 mittee on the Website of the Department of  
12 Health and Human Services.

13 “(E) TERMS.—The members of the Com-  
14 mittee shall each be appointed for a 3-year term  
15 and, at the end of each such term, may be re-  
16 appointed.

17 “(F) VACANCIES.—A vacancy on the Com-  
18 mittee shall be filled by the Secretary in the  
19 same manner in which the original appointment  
20 was made.

21 “(3) RESPONSIBILITIES.—The Committee shall  
22 develop and coordinate implementation of a plan to  
23 advance research and understanding of HHT by—

24 “(A) conducting or supporting basic,  
25 translational, and clinical research on HHT

1 across the relevant national research institutes,  
2 national centers, and offices of the National In-  
3 stitutes of Health, including the National  
4 Heart, Lung, and Blood Institute; the National  
5 Institute of Neurological Disorders and Stroke;  
6 the National Institutes of Diabetes and Diges-  
7 tive and Kidney Diseases; the Eunice Kennedy  
8 Shriver National Institute of Child Health and  
9 Human Development; the National Cancer In-  
10 stitute; and the Office of Rare Diseases; and

11 “(B) conducting evaluations and making  
12 recommendations to the Secretary, the Director  
13 of the National Institutes of Health, and the  
14 Director of the National Cancer Institute re-  
15 garding the prioritization and award of Na-  
16 tional Institutes of Health research grants re-  
17 lating to HHT, including with respect to grants  
18 for—

19 “(i) expand understanding of HHT  
20 through basic, translational, and clinical  
21 research on the cause, diagnosis, preven-  
22 tion, control, and treatment of HHT;

23 “(ii) training programs on HHT for  
24 scientists and health professionals; and

1                   “(iii) HHT genetic testing research to  
2                   improve the accuracy of genetic testing.

3                   “(c) DEFINITIONS.—In this section:

4                   “(1) The term ‘Committee’ means the HHT  
5                   Coordinating Committee established under sub-  
6                   section (b).

7                   “(2) The term ‘HHT’ means hereditary hemor-  
8                   rhagic telangiectasia.”.

9   **SEC. 5. CENTERS FOR DISEASE CONTROL AND PREVEN-**  
10                   **TION.**

11                   Part B of title III of the Public Health Service Act  
12 is amended by inserting after section 317T (42 U.S.C.  
13 247b–22) the following:

14   **“SEC.           317U.           HEREDITARY           HEMORRHAGIC**  
15                   **TELANGIECTASIA.**

16                   “(a) IN GENERAL.—With respect to hereditary hem-  
17 orrhagic telangiectasia (in this section referred to as  
18 ‘HHT’), the Director of the Centers for Disease Control  
19 and Prevention (in this section referred to as the ‘Direc-  
20 tor’) shall carry out the following activities:

21                   “(1) The conduct of population screening de-  
22 scribed in subsection (c).

23                   “(2) The identification and conduct of inves-  
24 tigation to further develop and support guidelines



1 for diagnosis of, and intervention for, HHT, includ-  
2 ing cost-benefit studies.

3 “(3) The development of a standardized survey  
4 and screening tool on family history.

5 “(4) The establishment, in collaboration with a  
6 voluntary health organization representing HHT  
7 families, of an HHT resource center within the Cen-  
8 ters for Disease Control and Prevention to provide  
9 comprehensive education on, and disseminate infor-  
10 mation about, HHT to health professionals, pa-  
11 tients, industry, and the public.

12 “(5) The conduct or support of public aware-  
13 ness programs in collaboration with medical, genetic,  
14 and professional organizations to improve the edu-  
15 cation of health professionals about HHT.

16 “(b) COLLABORATIVE APPROACHES.—The Director  
17 shall carry out this section through collaborative ap-  
18 proaches within the National Center on Birth Defects and  
19 Developmental Disabilities and the Division for Heart Dis-  
20 ease and Stroke Prevention of the Centers for Disease  
21 Control and Prevention.

22 “(c) POPULATION SCREENING.—In carrying out pop-  
23 ulation screening under subsection (a)(1), the Director  
24 shall—

1           “(1) designate and provide funding for a suffi-  
2           cient number of HHT Treatment Centers of Excel-  
3           lence to improve patient access to information, treat-  
4           ment, and care by HHT experts;

5           “(2) conduct surveillance through a regional  
6           population study, supplemented by sentinel health  
7           care provider or center surveillance, and administra-  
8           tive database analyses as useful to accurately iden-  
9           tify—

10                   “(A) the prevalence of HHT; and

11                   “(B) the prevalence of hemorrhagic and  
12           embolic stroke and brain abscess, resulting  
13           from HHT;

14           “(3) include HHT screening questions in the  
15           Behavioral Risk Factor Surveillance System survey  
16           conducted by the Centers for Disease Control and  
17           Prevention in order to screen a broader population  
18           and more accurately determine the prevalence of  
19           HHT;

20           “(4) disseminate data collected under para-  
21           graph (2)(B) to the Paul Coverdell National Acute  
22           Stroke Registry, to be utilized for analyses of nat-  
23           ural history of hemorrhagic and embolic stroke in  
24           HHT, and to develop screening and artery-vein mal-

1 formation treatment guidelines specific to prevention  
2 of complications from HHT;

3 “(5) develop and implement programs, targeted  
4 for physicians and health care professional groups  
5 likely to be accessed by families with HHT, to in-  
6 crease HHT diagnosis and treatment rates through  
7 the—

8 “(A) establishment of a partnership with  
9 HHT Treatment Centers of Excellence des-  
10 ignated under paragraph (1) through the cre-  
11 ation of an international database of patients  
12 assessed at such HHT Treatment Centers of  
13 Excellence (including with respect to phenotype  
14 information, genotype information, transfusion  
15 dependence, and radiological findings);

16 “(B) integration of such database with the  
17 universal data collection system used by the  
18 Centers for monitoring hemophilia with the  
19 blood disorders and the Paul Coverdell National  
20 Acute Stroke Registry; and

21 “(C) inclusion of other medical providers  
22 who treat HHT patients; and

23 “(6) use existing administrative databases on  
24 non-HHT Treatment Center of Excellence patients  
25 to learn about the natural history of HHT, the effi-

1 cacy of various treatment modalities, and to better  
2 inform and develop screening and treatment guide-  
3 lines associated with improvement in health care  
4 outcomes, and research priorities relevant to HHT.

5 “(d) ELIGIBILITY FOR DESIGNATION AS HHT  
6 TREATMENT CENTER OF EXCELLENCE.—In carrying out  
7 subsection (c)(1), the Director may designate as an HHT  
8 Treatment Center of Excellence only academic health cen-  
9 ters demonstrating each of the following:

10 “(1) The academic health center possesses a  
11 team of medical experts capable of providing com-  
12 prehensive evaluation, treatment, and education to  
13 individuals with known or suspected HHT and their  
14 health care providers.

15 “(2) The academic health center has sufficient  
16 personnel with knowledge about HHT, or formal col-  
17 laboration with partnering organizations for per-  
18 sonnel or resources, to be able to—

19 “(A) respond in a coordinated, multidisci-  
20 plinary way to patient inquiries; and

21 “(B) coordinate evaluation, treatment, and  
22 education of patients and their families in a  
23 timely manner.

24 “(3) The academic health center has the fol-  
25 lowing personnel, facilities, and patient volume:

1           “(A) A medical director with—

2                   “(i) specialized knowledge of the main  
3           organ manifestations of HHT; and

4                   “(ii) the ability to coordinate the mul-  
5           tidisciplinary diagnosis and treatment of  
6           patients referred to the center.

7           “(B) Administrative staff with—

8                   “(i) sufficient knowledge to respond to  
9           patient inquiries and coordinate patient  
10          care in a timely fashion; and

11                   “(ii) adequate financial support to  
12          allow the staff to commit at least 25 to 50  
13          percent of their time on the job to HHT.

14          “(C) An otolaryngologist with experience  
15          and expertise in the treatment of recurrent epi-  
16          staxis in HHT patients.

17          “(D) An interventional radiologist with ex-  
18          perience and expertise in the treatment of pul-  
19          monary arteriovenous malformations (AVM).

20          “(E) A genetic counselor or geneticist with  
21          the expertise to provide HHT-specific genetic  
22          counseling to patients and families.

23          “(F) On-site facilities to screen for all  
24          major organ manifestations of HHT.

1           “(G) A patient volume of at least 25 new  
2           HHT patients per year.

3           “(H) Established mechanisms to coordi-  
4           nate surveillance and outreach with HHT pa-  
5           tient advocacy organizations.”.

6 **SEC. 6. ADDITIONAL HEALTH AND HUMAN SERVICES AC-**  
7           **TIVITIES.**

8           With respect to hereditary hemorrhagic telangiectasia  
9 (in this sec referred to as “HHT”), the Secretary of  
10 Health and Human Services, acting through the Adminis-  
11 trator of the Centers for Medicare & Medicaid Services,  
12 shall award grants on a competitive basis—

13           (1) for an analysis by grantees of the Medicare  
14           Provider Analysis and Review (MEDPAR) file to de-  
15           velop preliminary estimates on the total costs to the  
16           Medicare program under title XVIII of the Social  
17           Security Act for items, services, and treatments for  
18           HHT furnished to individuals with HHT who are  
19           entitled to benefits under part A of title XVIII of  
20           the Social Security Act or enrolled under part B of  
21           such title; and

22           (2) to make recommendations regarding an en-  
23           hanced data collection protocol to permit a more  
24           precise determination of the total costs described in  
25           paragraph (1).

1 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

2 (a) IN GENERAL.—To carry out section 409K of the  
3 Public Health Service Act as added by section 4 of this  
4 Act, section 317U of the Public Health Service Act as  
5 added by section 5 of this Act, and section 6 of this Act,  
6 there is authorized to be appropriated \$5,000,000 for each  
7 of fiscal years 2012 through 2016.

8 (b) RESOURCE CENTER.—Of the amount authorized  
9 to be appropriated under subsection (a) for each of fiscal  
10 years 2012 through 2016, \$1,000,000 shall be for car-  
11 rying out section 317U(a)(4) of the Public Health Service  
12 Act, as added by section 5 of this Act.

○