

## Calendar No. 287

116TH CONGRESS  
1ST SESSION

# S. 1657

To provide assistance to combat the escalating burden of Lyme disease and other tick and vector-borne diseases and disorders.

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### IN THE SENATE OF THE UNITED STATES

MAY 23 (legislative day, MAY 22), 2019

Ms. COLLINS (for herself, Ms. SMITH, Mr. KING, Mrs. CAPITO, Mr. BLUMENTHAL, Mrs. HYDE-SMITH, Mr. MURPHY, Mr. BOOZMAN, Ms. HASSAN, Mr. BRAUN, and Mr. SANDERS) introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

NOVEMBER 5, 2019

Reported by Mr. ALEXANDER, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

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## A BILL

To provide assistance to combat the escalating burden of Lyme disease and other tick and vector-borne diseases and disorders.

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 “~~Ticks: Identify, Con-~~  
5 ~~trol, and Knockout Act~~” or the “~~TICK Act~~”.

1 **SEC. 2. OFFICE OF OVERSIGHT AND COORDINATION FOR**  
 2 **VECTOR-BORNE DISEASE.**

3 (a) ~~ESTABLISHMENT.~~—The Secretary of Health and  
 4 Human Services (referred to in this Act as the “Sec-  
 5 retary”) shall establish in the Office of the Secretary an  
 6 Office of Oversight and Coordination for Vector-Borne  
 7 Diseases (referred to in this Act as the “Office”), to be  
 8 headed by a director to be appointed by the Secretary.

9 (b) ~~DUTIES OF THE OFFICE.~~—

10 (1) ~~IN GENERAL.~~—The Director of the Office  
 11 shall—

12 (A) oversee the creation and maintenance  
 13 of a national strategy to address Lyme disease,  
 14 and other tick and vector-borne diseases as pro-  
 15 vided for in paragraph (2); and

16 (B) oversee and coordinate Lyme disease  
 17 and other tick and vector-borne disease and dis-  
 18 order programs and activities across the agen-  
 19 cies and offices of the Department of Health  
 20 and Human Services and other Federal agen-  
 21 cies outside of the Department of Health and  
 22 Human Services, as appropriate.

23 (2) ~~NATIONAL STRATEGY.~~—

24 (A) ~~IN GENERAL.~~—The Director of the Of-  
 25 fice shall provide for the conduct of an annual  
 26 assessment of the progress of the United States

1 in preparing for the escalating burden of Lyme  
2 disease and other tick and vector-borne diseases  
3 and disorders, including an assessment of all  
4 Federally funded programs and activities re-  
5 lated to surveillance, diagnosis, treatment, edu-  
6 cation, or prevention, as well as implementation  
7 steps, and recommendations for priority actions,  
8 with appropriate benchmarks to measure  
9 progress, based on the assessment.

10 (B) NON-FEDERAL PERSPECTIVES.—In de-  
11 veloping the strategy under subparagraph (A),  
12 and maintaining it, the Director shall consult  
13 with non-Federal individuals with appropriate  
14 expertise, which may include—

15 (i) epidemiologists with experience in  
16 surveillance, treatment, education, or pre-  
17 vention of vector-borne diseases;

18 (ii) representatives of national patient  
19 advocacy and research organizations that  
20 focus on vector-borne diseases, and those  
21 that focus specifically on tick-borne disease  
22 and have demonstrated experience in re-  
23 search, data collection, or patient access to  
24 care;

(iii) health information technology experts or other information management specialists;

(iv) clinicians, entomologists, vector-management professionals, integrated pest management professionals, public health professionals, and others with expertise in vector-borne disease, including Lyme disease or other tick-borne diseases or disorders; and

(v) research scientists with experience conducting translational research or utilizing surveillance systems for scientific research purposes.

(c) OBJECTIVE OF THE OFFICE.—In carrying out subsection (b), the Director of the Office shall facilitate and work to ensure the accomplishment of the following activities:

(1) Expansion and enhancement of epidemiological research and basic, translational, and clinical biological and biomedical research.

(2) Expansion and improvement of tick surveillance, linking tick surveillance to surveillance of Lyme disease, and reporting of Lyme disease and other tick- and vector-borne diseases, including co-

1 infections with agents of more than one tick or vec-  
2 tor-borne diseases.

3 (3) Development of effective diagnostic tests to  
4 accurately and timely diagnose Lyme disease and  
5 other tick- and vector-borne diseases, including di-  
6 rect detection tests.

7 (4) Development of treatments to cure or im-  
8 prove the lives of those who are infected with Lyme  
9 disease or other tick-and vector-borne diseases or  
10 who suffer from a tick-induced disorder (such as tick  
11 PIM programs).

12 (5) Address the quality of patient care, treat-  
13 ment affordability, and public awareness of Lyme  
14 disease and other tick or vector-borne diseases.

15 (6) Design and conduct clinical trials of suffi-  
16 cient size and duration to support clinical rec-  
17 ommendations.

18 (7) Systematic documentation of the experi-  
19 ences of health care professionals in diagnosing and  
20 treating tick- and vector-borne disease, including di-  
21 agnostic and treatment outcomes.

22 (8) Development and maintenance of one or  
23 more registries of patients and their experiences re-  
24 lating to exposure to, diagnosis for, and treatment  
25 of tick- and vector-borne disease, including out-

1 comes, such that the confidentiality and safety of  
 2 patient data is protected.

3 ~~(9) Access to data and enable emerging tech-~~  
 4 ~~nologies to improve patient care, sharing data with~~  
 5 ~~researchers and care providers.~~

6 ~~(10) Coordination with other Federal depart-~~  
 7 ~~ments to address tick- and other vector-borne dis-~~  
 8 ~~eases including the Department of Defense, the De-~~  
 9 ~~partment of Agriculture, the Environmental Protec-~~  
 10 ~~tion Agency, the Department of Interior, and the~~  
 11 ~~Department of Homeland Security.~~

12 ~~(11) Coordination with the Tick-Borne Disease~~  
 13 ~~Working Group established under section 2062 of~~  
 14 ~~the 21st Century Cures Act (42 U.S.C. 284s) to de-~~  
 15 ~~velop and implement recommendations.~~

16 ~~(12) Coordination with international bodies to~~  
 17 ~~integrate and inform the fight against Lyme disease,~~  
 18 ~~and other tick- and vector-borne diseases globally.~~

19 **SEC. 3. REGIONAL CENTERS OF EXCELLENCE IN TICK AND**  
 20 **VECTOR-BORNE DISEASES.**

21 ~~(a) IN GENERAL.~~—The Secretary, in coordination  
 22 with the Director of the Centers for Disease Control and  
 23 Prevention and the heads of other agencies as appropriate,  
 24 shall award grants, contracts, or cooperative agreements  
 25 to eligible entities (such as institutions of higher edu-

1 cation, State, tribal, and local health departments, asso-  
 2 ciations, or other appropriate entities) for the establish-  
 3 ment or support of Regional Centers of Excellence in Tick  
 4 and Vector-Borne Diseases. Such Regional Centers shall  
 5 be designed to address Lyme disease and other tick and  
 6 vector-borne diseases by—

7           (1) building collaboration between academia  
 8           and public health agencies for surveillance, preven-  
 9           tion and response to Lyme disease and other tick  
 10          and vector-borne diseases;

11          (2) providing training for public health ento-  
 12          mologists to deal with Lyme disease and other tick  
 13          and vector-borne diseases; and

14          (3) conducting applied research to develop and  
 15          validate prevention and control tools and methods;  
 16          and to anticipate and respond to outbreaks of Lyme  
 17          disease and other tick and vector-borne diseases.

18          (b) ELIGIBILITY.—To be eligible to receive a grant,  
 19          contract, or cooperative agreement under this section, an  
 20          entity shall prepare and submit to the Secretary an appli-  
 21          cation at such time, in such manner, and containing such  
 22          agreements and information as the Secretary may require,  
 23          including a description of how the entity will—

1           (1) coordinate, as applicable, with existing Fed-  
2       eral, State, and tribal programs related to Lyme dis-  
3       ease and other vector-borne diseases;

4           (2) examine, evaluate, and promote evidence-  
5       based interventions for individuals with Lyme dis-  
6       ease and other tick- and vector-borne diseases, in-  
7       cluding those in rural and underserved populations,  
8       and those who provide care for such individuals; and

9           (3) prioritize activities relating to—

10           (A) expanding efforts, as appropriate, to  
11       implement evidence-based practices to address  
12       Lyme disease and other tick- and vector-borne  
13       diseases, including through the training of  
14       State, local, and tribal public health officials  
15       and other health professionals on such prac-  
16       tices;

17           (B) supporting surveillance of vectors, and  
18       early detection and diagnosis of Lyme and  
19       other tick- and vector-borne diseases, including  
20       improving the quality and reliability of diag-  
21       nostic tools at all stages of disease progression,  
22       and developing a Lyme disease test capable of  
23       distinguishing between past and active infec-  
24       tions;



1           (C) improving the safety and efficacy of  
2           any new, renewed, or modified human vaccine  
3           for Lyme disease, other tick- and vector-borne  
4           diseases, or a combination of such diseases;

5           (D) developing a standardized screening  
6           protocol for Lyme disease and other tick- and  
7           vector-borne diseases;

8           (E) enhancing studies and activities on  
9           tick biology, disease ecology, and surveillance;  
10          and tick management; and

11          (F) supporting other relevant activities  
12          identified by the Secretary or the Director of  
13          the Centers for Disease Control and Prevention,  
14          as appropriate.

15       (c) CONSIDERATIONS.—In awarding grants, con-  
16       tracts, and cooperative agreements under this section, the  
17       Secretary shall consider, among other factors, whether the  
18       entity—

19           (1) provides services to rural areas or other un-  
20           derserved populations;

21           (2) is able to build on an existing infrastructure  
22           of services and public health research;

23           (3) is located in an area with a high prevalence,  
24           or in any area predicted to have a high prevalence;

1 of Lyme disease or other tick- and vector-borne dis-  
 2 eases; and

3 (4) has experience with conducting research re-  
 4 lated to Lyme disease and other tick- and vector-  
 5 borne diseases.

6 (d) AUTHORIZATION OF APPROPRIATIONS.—For the  
 7 purpose of carrying out this section, there are authorized  
 8 to be appropriated \$10,000,000 for each of fiscal years  
 9 from 2021 through 2026. Amounts appropriated shall be  
 10 allocated under this section to diseases in a manner that  
 11 proportionately matches the disease burden of those dis-  
 12 eases in the United States, which shall be reassessed and  
 13 adjusted annually.

14 **SEC. 4. COOPERATIVE AGREEMENTS WITH THE CENTERS**  
 15 **FOR DISEASE CONTROL AND PREVENTION.**

16 (a) IN GENERAL.—The Secretary, in coordination  
 17 with the Director of the Centers for Disease Control and  
 18 Prevention and the heads of other agencies, as appro-  
 19 priate, shall enter into cooperative agreements between the  
 20 Centers for Disease Control and Prevention and health de-  
 21 partments of States, political subdivisions of States, and  
 22 Indian tribes and tribal organizations, to address Lyme  
 23 Disease and other tick- and vector-borne diseases, and to  
 24 support the development and implementation of evidence-

1 based research, interventions, and treatment with respect  
 2 to—

- 3           (1) educating and informing the public, based
- 4           on evidence-based public health research and data;
- 5           about Lyme Disease and other vector-borne diseases;
- 6           (2) supporting early detection and diagnosis;
- 7           (3) supporting prevention;
- 8           (4) improving treatment;
- 9           (5) supporting care planning and management
- 10          for individuals with Lyme disease and other tick-
- 11          and vector-borne diseases; and
- 12          (6) supporting other relevant activities identi-
- 13          fied by the Secretary or the Director of the Centers
- 14          for Disease Control and Prevention, as appropriate.

15       (b) ELIGIBILITY.—To be eligible to enter into a coop-  
 16       erative agreement under this section, an entity described  
 17       in subsection (a) shall prepare and submit to the Secretary  
 18       an application at such time, in such manner, and con-  
 19       taining such information as the Secretary may require, in-  
 20       cluding a plan that describes—

- 21           (1) how the applicant proposes to develop or ex-
- 22           pand programs to educate individuals through part-
- 23           nership engagement, workforce development, guid-
- 24           ance and support for programmatic efforts, and
- 25           evaluation with respect to Lyme disease and other

1 tick- or vector-borne diseases, and how the applicant  
 2 proposes to support other relevant activities identi-  
 3 fied by the Secretary or the Director of the Centers  
 4 for Disease Control and Prevention, as appropriate;

5 (2) the manner in which the applicant will co-  
 6 ordinate with Federal, tribal, and State programs  
 7 related to Lyme Disease and other vector-borne dis-  
 8 eases, and appropriate State, tribal, and local agen-  
 9 cies, as well as other relevant public and private or-  
 10 ganizations or agencies; and

11 (3) the manner in which the applicant will  
 12 evaluate the effectiveness of any program carried out  
 13 under the cooperative agreement.

14 (c) AUTHORIZATION OF APPROPRIATIONS.—For the  
 15 purpose of carrying out this section, there are authorized  
 16 to be appropriated \$20,000,000 for each of fiscal years  
 17 from (2021 through 2026). Amounts appropriated shall  
 18 be allocated under this section to diseases in a manner  
 19 that proportionately matches the disease burden of those  
 20 diseases in the United States, which shall be reassessed  
 21 and adjusted annually.

22 **SECTION 1. SHORT TITLE.**

23 *This Act may be cited as the “Kay Hagan Tick Act”.*

1 **SEC. 2. COMBATING VECTOR-BORNE DISEASES.**

2 *Title III of the Public Health Service Act is amended*  
 3 *by inserting after section 317T (42 U.S.C. 247b–22) the fol-*  
 4 *lowing:*

5 **“SEC. 317U. NATIONAL STRATEGY AND REGIONAL CENTERS**  
 6 **OF EXCELLENCE IN VECTOR-BORNE DIS-**  
 7 **EASES.**

8 *“(a) IN GENERAL.—The Secretary, acting through the*  
 9 *Assistant Secretary for Health, shall—*

10 *“(1) ensure the development and implementation*  
 11 *of a national strategy to address vector-borne diseases,*  
 12 *including tick-borne diseases, consistent with sub-*  
 13 *section (b); and*

14 *“(2) coordinate programs and activities, includ-*  
 15 *ing related to data collection, research, and the devel-*  
 16 *opment of diagnostics, treatments, vaccines, and other*  
 17 *related activities, to address vector-borne diseases, in-*  
 18 *cluding tick-borne diseases, across the Department of*  
 19 *Health and Human Services and with other Federal*  
 20 *agencies or departments, as appropriate.*

21 *“(b) STRATEGY.—*

22 *“(1) IN GENERAL.—The Secretary, in coordina-*  
 23 *tion with the Secretary of Defense, the Secretary of*  
 24 *Agriculture, the Administrator of the Environmental*  
 25 *Protection Agency, the Secretary of the Interior, the*  
 26 *Secretary of Veterans Affairs, the Secretary of Home-*

1 *land Security, and others, as appropriate, shall de-*  
2 *velop a strategy to address gaps in Federal programs,*  
3 *and assess the progress of the United States in, ad-*  
4 *dressing vector-borne diseases, including tick-borne*  
5 *diseases. Such strategy shall—*

6 *“(A) assess gaps and unnecessary duplica-*  
7 *tion in federally funded programs and activities*  
8 *related to surveillance, diagnosis, treatment, edu-*  
9 *cation, pathogenesis, or prevention of vector-*  
10 *borne diseases, including tick-borne diseases,*  
11 *which may include taking into consideration rel-*  
12 *evant strategic plans made by other agencies;*

13 *“(B) identify gaps and unnecessary dupli-*  
14 *cation with respect to—*

15 *“(i) epidemiological, basic,*  
16 *translational, and clinical research on vec-*  
17 *tor-borne diseases, including tick-borne dis-*  
18 *eases; and*

19 *“(ii) vector surveillance, registries, and*  
20 *disease monitoring, including coinfections*  
21 *with agents of more than one vector-borne*  
22 *disease;*

23 *“(C) identify strategic goals related to ad-*  
24 *dressing vector-borne diseases, including tick-*  
25 *borne diseases, including goals related to the de-*

1        *velopment of diagnostics, treatments, vaccines,*  
 2        *and other related measures, as appropriate, and*  
 3        *benchmarks to measure progress;*

4                *“(D) identify ways to improve the care and*  
 5        *treatment of individuals with vector-borne dis-*  
 6        *eases, including tick-borne diseases, and to im-*  
 7        *prove public awareness of such diseases; and*

8                *“(E) update such strategy biennially.*

9                *“(2) NON-FEDERAL PERSPECTIVES.—In devel-*  
 10        *oping and updating, as applicable, the strategy under*  
 11        *paragraph (1), the Secretary shall—*

12                *“(A) coordinate with the Tick-Borne Dis-*  
 13        *ease Working Group established under section*  
 14        *2062 of the 21st Century Cures Act (42 U.S.C.*  
 15        *284s), as appropriate; and*

16                *“(B) consult with non-Federal individuals*  
 17        *with appropriate expertise, which may include—*

18                *“(i) epidemiologists with experience in*  
 19        *vector-borne diseases, including tick-borne*  
 20        *diseases;*

21                *“(ii) representatives of patient advoca-*  
 22        *cacy and research organizations that focus*  
 23        *on vector-borne diseases, including those*  
 24        *that focus specifically on tick-borne diseases*  
 25        *and have demonstrated experience in related*

1                   *research, public health, data collection, or*  
2                   *patient access to care;*

3                   “(iii) *health information technology ex-*  
4                   *perts or other information management spe-*  
5                   *cialists;*

6                   “(iv) *clinicians, entomologists, vector*  
7                   *management professionals, public health*  
8                   *professionals, and others with expertise in*  
9                   *vector-borne diseases, including tick-borne*  
10                  *diseases; and*

11                  “(v) *researchers, including researchers*  
12                  *with experience conducting translational re-*  
13                  *search.*

14                  “(c) *CENTERS OF EXCELLENCE.—The Secretary, in*  
15                  *coordination with the Director of the Centers for Disease*  
16                  *Control and Prevention and the heads of other agencies, as*  
17                  *appropriate, shall award grants, contracts, or cooperative*  
18                  *agreements to institutions of higher education for the estab-*  
19                  *lishment or continued support of regional centers of excel-*  
20                  *lence in vector-borne diseases to address vector-borne dis-*  
21                  *eases, including tick-borne diseases, by—*

22                  “(1) *facilitating collaboration between academia*  
23                  *and public health organizations for public health sur-*  
24                  *veillance, prevention, and response activities related*  
25                  *to vector-borne diseases, including tick-borne diseases;*



1           “(2) providing training for public health ento-  
2           mologists and other health care professionals, as ap-  
3           propriate, to address vector-borne diseases, including  
4           tick-borne diseases;

5           “(3) conducting research to develop and validate  
6           prevention and control tools and methods, including  
7           evidence-based and innovative, evidence-informed  
8           tools and methods to anticipate and respond to dis-  
9           ease outbreaks; or

10          “(4) preparing for and responding to outbreaks  
11          of vector-borne diseases, including tick-borne diseases.

12          “(d) *ELIGIBILITY*.—To be eligible to receive a grant,  
13          contract, or cooperative agreement under subsection (c), an  
14          entity shall submit to the Secretary an application at such  
15          time, in such manner, and containing such information as  
16          the Secretary may require, including a description of how  
17          the entity will conduct the activities described in such sub-  
18          section.

19          “(e) *REPORTS*.—

20                 “(1) *PROGRAM SUMMARY*.—An entity receiving  
21                 an award under subsection (c) shall, not later than  
22                 one year after receiving such award, and annually  
23                 thereafter, submit to the Secretary a summary of pro-  
24                 grams and activities funded under the award.

1           “(2) *PROGRESS REPORT.*—Not later than 4 years  
 2           after the date of enactment of this section, the Sec-  
 3           retary shall submit to the Committee on Health, Edu-  
 4           cation, Labor, and Pensions of the Senate and the  
 5           Committee on Energy and Commerce of the House of  
 6           Representatives, a report on the progress made in ad-  
 7           dressing vector-borne diseases, including tick-borne  
 8           diseases, through activities carried out under this sec-  
 9           tion.

10          “(f) *AUTHORIZATION OF APPROPRIATIONS.*—For the  
 11         purpose of carrying out this section, there are authorized  
 12         to be appropriated \$10,000,000 for each of fiscal years 2021  
 13         through 2025.”.

14         **SEC. 3. ENHANCING CAPACITY TO ADDRESS VECTOR-**  
 15                 **BORNE DISEASES.**

16           (a) *ENHANCED SUPPORT.*—Subtitle C of title XXVIII  
 17         of the Public Health Service Act (42 U.S.C. 300hh-31 et  
 18         seq.) is amended by adding at the end the following:

19         **“SEC. 2822. ENHANCED SUPPORT TO ASSIST HEALTH DE-**  
 20                 **PARTMENTS IN ADDRESSING VECTOR-BORNE**  
 21                 **DISEASES.**

22           “(a) *IN GENERAL.*—The Secretary, acting through the  
 23         Director of the Centers for Disease Control and Prevention,  
 24         may enter into cooperative agreements with health depart-  
 25         ments of States, political subdivisions of States, and Indian

1 *Tribes and Tribal organizations in areas at high risk of*  
 2 *vector-borne diseases in order to increase capacity to iden-*  
 3 *tify, report, prevent, and respond to such diseases and re-*  
 4 *lated outbreaks.*

5       “(b) *ELIGIBILITY.*—*To be eligible to enter into a coop-*  
 6 *erative agreement under this section, an entity described in*  
 7 *subsection (a) shall prepare and submit to the Secretary*  
 8 *an application at such time, in such manner, and con-*  
 9 *taining such information as the Secretary may require, in-*  
 10 *cluding a plan that describes—*

11               “(1) *how the applicant proposes to develop or ex-*  
 12 *pand programs to address vector-borne diseases risks,*  
 13 *including through—*

14                       “(A) *related training and workforce devel-*  
 15 *opment;*

16                       “(B) *programmatic efforts to improve ca-*  
 17 *capacity to identify, report, prevent, and respond*  
 18 *to such disease and related outbreaks; and*

19                       “(C) *other relevant activities identified by*  
 20 *the Director of the Centers for Disease Control*  
 21 *and Prevention, as appropriate;*

22               “(2) *the manner in which the applicant will co-*  
 23 *ordinate with other Federal, Tribal, and State agen-*  
 24 *cies and programs, as applicable, related to vector-*

1        *borne diseases, as well as other relevant public and*  
2        *private organizations or agencies; and*

3                *“(3) the manner in which the applicant will*  
4        *evaluate the effectiveness of any program carried out*  
5        *under the cooperative agreement.*

6        *“(c) AUTHORIZATION OF APPROPRIATIONS.—For the*  
7        *purposes of carrying out this section, there are authorized*  
8        *to be appropriated \$20,000,000 for each of fiscal years 2021*  
9        *through 2025.”.*



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**A BILL**

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Reported with an amendment