

## Calendar No. 45

115TH CONGRESS  
1ST SESSION

# S. 849

To support programs for mosquito-borne and other vector-borne disease  
surveillance and control.

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### IN THE SENATE OF THE UNITED STATES

APRIL 5 (legislative day, APRIL 4), 2017

Mr. KING (for himself, Mr. BURR, Mr. NELSON, Mr. RUBIO, Mr. ALEXANDER,  
and Ms. HIRONO) introduced the following bill; which was read twice and  
referred to the Committee on Health, Education, Labor, and Pensions

MAY 1, 2017

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 support programs for mosquito-borne and other vector-  
borne disease surveillance and control.

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 “Strengthening Mos-  
5 quito Abatement for Safety and Health Act” or the  
6 “SMASH Act”.

1 **SEC. 2. REAUTHORIZATION OF MOSQUITO ABATEMENT FOR**  
 2 **SAFETY AND HEALTH PROGRAM.**

3 Section 317S of the Public Health Service Act (42  
 4 U.S.C. 247b–21) is amended—

5 (1) in subsection (a)(1)(B)—

6 (A) by inserting “including programs to  
 7 address emerging infectious mosquito-borne dis-  
 8 eases,” after “control programs,”; and

9 (B) by inserting “or improving existing  
 10 control programs” before the period at the end;

11 (2) in subsection (b)—

12 (A) in paragraph (1), by inserting “, in-  
 13 cluding improvement,” after “operation”;

14 (B) in paragraph (2)—

15 (i) in subparagraph (A)—

16 (I) in clause (ii), by striking “or”  
 17 at the end;

18 (II) in clause (iii), by striking the  
 19 semicolon at the end and inserting “,  
 20 including an emerging infectious mos-  
 21 quito-borne disease that presents a se-  
 22 rious public health threat; or”; and

23 (III) by adding at the end the  
 24 following:

25 “(iv) a public health emergency due to  
 26 the incidence or prevalence of a mosquito-

1           borne disease that presents a serious pub-  
2           lic health threat.”; and

3                   (ii) in subparagraph (D), by inserting  
4           “or that demonstrates to the Secretary  
5           that the control program is consistent with  
6           existing State mosquito control plans, or  
7           policies, or other applicable State pre-  
8           paredness plans” before the period at the  
9           end;

10           (C) in paragraph (4)(C), by striking “that  
11           extraordinary” and all that follows through the  
12           period at the end and inserting “that—

13                   “(i) extraordinary economic conditions  
14           in the political subdivision or consortium of  
15           political subdivisions involved justify the  
16           waiver; or

17                   “(ii) the geographical area covered by  
18           a political subdivision or consortium for a  
19           grant under paragraph (1) has an extreme  
20           need due to—

21                   “(I) the size or density of the  
22           human population;

23                   “(II) the size or density of the  
24           mosquito population; or

1                   “(III) the severity of the mos-  
 2                   quito-borne disease, such that ex-  
 3                   pected serious adverse health out-  
 4                   comes for the human population jus-  
 5                   tify the waiver.”; and

6                   (D) by amending paragraph (6) to read as  
 7                   follows:

8                   “(6) NUMBER OF GRANTS.—A political subdivi-  
 9                   sion or a consortium of political subdivisions may  
 10                  not receive more than one grant under paragraph  
 11                  (1).”; and

12                  (3) in subsection (f)—

13                   (A) in paragraph (1), by striking  
 14                   “\$100,000,000 for fiscal year 2003, and such  
 15                   sums as may be necessary for each of fiscal  
 16                   years 2004 through 2007” and inserting  
 17                   “\$130,000,000 for each of fiscal years 2017  
 18                   through 2022”;

19                   (B) in paragraph (2), by striking “the  
 20                   Public Health Security and Bioterrorism Pre-  
 21                   paredness and Response Act of 2002” and in-  
 22                   serting “other medical and public health pre-  
 23                   paredness and response laws”; and

24                   (C) in paragraph (3)—

- 1 (i) in the heading, by striking “2004”  
 2 and inserting “2018”; and  
 3 (ii) by striking “2004” and inserting  
 4 “2018”.

5 **SEC. 3. EPIDEMIOLOGY-LABORATORY CAPACITY GRANTS.**

6 Section 2821 of the Public Health Service Act (42  
 7 U.S.C. 300hh-31) is amended—

- 8 (1) in subsection (a)(1), by inserting “, includ-  
 9 ing mosquito and other vector-borne diseases,” after  
 10 “infectious diseases”; and  
 11 (2) in subsection (b), by striking “2010 through  
 12 2013” and inserting “2017 through 2022”.

13 **SEC. 4. GAO STUDY.**

14 (a) STUDY.—The Comptroller General of the United  
 15 States shall conduct a study on the state of surveillance  
 16 and control of mosquito-borne infectious diseases in the  
 17 United States and territories, including the state of pre-  
 18 paredness for conducting such surveillance and control.  
 19 The study shall include—

- 20 (1) a description of the infrastructure and pro-  
 21 grams for mosquito control in the United States, in-  
 22 cluding—  
 23 (A) how such infrastructure and programs  
 24 are organized and implemented at the Federal,  
 25 State and local levels, including with respect to

1 departments and agencies of the States, and  
2 local organizations (including special districts)  
3 involved in such control programs;

4 (B) the role of the private sector in such  
5 activities;

6 (C) how the authority for mosquito control  
7 impacts such activities; and

8 (D) the resources for such infrastructure  
9 and programs, including Federal, State, and  
10 local funding sources;

11 (2) how mosquito and other vector-borne dis-  
12 ease surveillance and control is integrated into Fed-  
13 eral, State, and local preparedness plans and ac-  
14 tions, including how zoonotic surveillance is inte-  
15 grated into infectious disease surveillance to support  
16 real-time situational surveillance and awareness;

17 (3) Federal, State, and local laboratory capacity  
18 for emerging vector-borne diseases, including mos-  
19 quito-borne and other zoonotic diseases; and

20 (4) any regulatory challenges for developing and  
21 utilizing vector-control technologies and platforms as  
22 part of mosquito control strategies.

23 (b) CONSULTATIONS.—In conducting the study under  
24 subsection (a), the Comptroller General of the United  
25 States shall consult with—

1           (1) State and local public health officials in-  
 2           volved in mosquito and other vector-borne disease  
 3           surveillance and control efforts;

4           (2) researchers and manufacturers of mosquito  
 5           control products;

6           (3) stakeholders involved in mosquito abate-  
 7           ment activities;

8           (4) infectious disease experts; and

9           (5) entomologists involved in mosquito-borne  
 10          disease surveillance and control efforts.

11          (c) REPORT.—Not later than 18 months after the  
 12          date of enactment of this Act, the Comptroller General  
 13          of the United States shall submit to the Committee on  
 14          Health, Education, Labor, and Pensions of the Senate and  
 15          the Committee on Energy and Commerce of the House  
 16          of Representatives a report containing the results of the  
 17          study conducted under subsection (a) and relevant rec-  
 18          ommendations for Zika virus and other mosquito-borne  
 19          diseases preparedness and response efforts.

20          **SECTION 1. SHORT TITLE.**

21                 *This Act may be cited as the “Strengthening Mosquito*  
 22                 *Abatement for Safety and Health Act” or the “SMASH*  
 23                 *Act”.*

1 **SEC. 2. REAUTHORIZATION OF MOSQUITO ABATEMENT FOR**  
 2 **SAFETY AND HEALTH PROGRAM.**

3 *Section 317S of the Public Health Service Act (42*  
 4 *U.S.C. 247b–21) is amended—*

5 *(1) in subsection (a)(1)(B)—*

6 *(A) by inserting “including programs to ad-*  
 7 *dress emerging infectious mosquito-borne dis-*  
 8 *eases,” after “control programs,”; and*

9 *(B) by inserting “or improving existing*  
 10 *control programs” before the period at the end;*

11 *(2) in subsection (b)—*

12 *(A) in paragraph (1), by inserting “, in-*  
 13 *cluding improvement,” after “operation”;*

14 *(B) in paragraph (2)—*

15 *(i) in subparagraph (A)—*

16 *(I) in clause (ii), by striking “or”*  
 17 *at the end;*

18 *(II) in clause (iii), by striking the*  
 19 *semicolon at the end and inserting “,*  
 20 *including an emerging infectious mos-*  
 21 *quito-borne disease that presents a seri-*  
 22 *ous public health threat; or”;* and

23 *(III) by adding at the end the fol-*  
 24 *lowing:*

25 *“(iv) a public health emergency due to*  
 26 *the incidence or prevalence of a mosquito-*

borne disease that presents a serious public health threat.”; and

(ii) in subparagraph (D), by inserting “or that demonstrates to the Secretary that the control program is consistent with existing State mosquito control plans or policies, or other applicable State preparedness plans” before the period at the end;

(C) in paragraph (4)(C), by striking “that extraordinary” and all that follows through the period at the end and inserting “that—

“(i) extraordinary economic conditions in the political subdivision or consortium of political subdivisions involved justify the waiver; or

“(ii) the geographical area covered by a political subdivision or consortium for a grant under paragraph (1) has an extreme mosquito control need due to—

“(I) the size or density of the potentially impacted human population;

“(II) the size or density of a mosquito population that requires heightened control; or

1                   “(III) the severity of the mos-  
 2                   quito-borne disease, such that expected  
 3                   serious adverse health outcomes for the  
 4                   human population justify the waiver.”;  
 5                   and

6                   (D) by amending paragraph (6) to read as  
 7                   follows:

8                   “(6) NUMBER OF GRANTS.—A political subdivi-  
 9                   sion or a consortium of political subdivisions may not  
 10                  receive more than one grant under paragraph (1).”;  
 11                  and

12                 (3) in subsection (f)—

13                   (A) in paragraph (1), by striking “for fiscal  
 14                   year 2003, and such sums as may be necessary  
 15                   for each of fiscal years 2004 through 2007” and  
 16                   inserting “for each of fiscal years 2018 through  
 17                   2022”;

18                   (B) in paragraph (2), by striking “the Pub-  
 19                   lic Health Security and Bioterrorism Prepared-  
 20                   ness and Response Act of 2002” and inserting  
 21                   “other medical and public health preparedness  
 22                   and response laws”; and

23                   (C) in paragraph (3)—

24                   (i) in the heading, by striking “2004”  
 25                   and inserting “2018”; and

1                               (ii) by striking “2004” and inserting  
2                               “2018”.

3 **SEC. 3. EPIDEMIOLOGY-LABORATORY CAPACITY GRANTS.**

4       Section 2821 of the Public Health Service Act (42  
5 U.S.C. 300hh–31) is amended—

6                       (1) in subsection (a)(1), by inserting “, includ-  
7       ing mosquito and other vector-borne diseases,” after  
8       “infectious diseases”; and

9                       (2) in subsection (b), by striking “2010 through  
10       2013” and inserting “2018 through 2022”.

11 **SEC. 4. GAO STUDY.**

12       (a) *STUDY.*—The Comptroller General of the United  
13 States shall conduct a study on the state of surveillance and  
14 control of mosquito-borne infectious diseases in the United  
15 States and territories, including the state of preparedness  
16 for conducting such surveillance and control. The study  
17 shall include—

18                       (1) a description of the infrastructure and pro-  
19       grams for mosquito control in the United States, in-  
20       cluding—

21                               (A) how such infrastructure and programs  
22       are organized and implemented at the Federal,  
23       State and local levels, including with respect to  
24       departments and agencies of the States, and local

1           *organizations (including special districts) in-*  
2           *volved in such control programs;*

3           *(B) the role of the private sector in such ac-*  
4           *tivities;*

5           *(C) how the authority for mosquito control*  
6           *impacts such activities; and*

7           *(D) the resources for such infrastructure*  
8           *and programs, including Federal, State, and*  
9           *local funding sources;*

10          *(2) how mosquito and other vector-borne disease*  
11          *surveillance and control is integrated into Federal,*  
12          *State, and local preparedness plans and actions, in-*  
13          *cluding how zoonotic surveillance is integrated into*  
14          *infectious disease surveillance to support real-time*  
15          *situational surveillance and awareness;*

16          *(3) Federal, State, and local laboratory capacity*  
17          *for emerging vector-borne diseases, including mos-*  
18          *quito-borne and other zoonotic diseases; and*

19          *(4) any regulatory challenges for developing and*  
20          *utilizing vector-control technologies and platforms as*  
21          *part of mosquito control strategies.*

22          *(b) CONSULTATIONS.—In conducting the study under*  
23          *subsection (a), the Comptroller General of the United States*  
24          *shall consult with—*

1           (1) *State and local public health officials in-*  
2           *volved in mosquito and other vector-borne disease sur-*  
3           *veillance and control efforts;*

4           (2) *researchers and manufacturers of mosquito*  
5           *control products;*

6           (3) *stakeholders involved in mosquito abatement*  
7           *activities;*

8           (4) *infectious disease experts; and*

9           (5) *entomologists involved in mosquito-borne dis-*  
10          *ease surveillance and control efforts.*

11          (c) *REPORT.*—*Not later than 18 months after the date*  
12          *of enactment of this Act, the Comptroller General of the*  
13          *United States shall submit to the Committee on Health,*  
14          *Education, Labor, and Pensions of the Senate and the Com-*  
15          *mittee on Energy and Commerce of the House of Represent-*  
16          *atives a report containing the results of the study conducted*  
17          *under subsection (a) and relevant recommendations for*  
18          *Zika virus and other mosquito-borne diseases preparedness*  
19          *and response efforts.*

**Calendar No. 45**

115<sup>TH</sup> CONGRESS  
1<sup>ST</sup> Session

**S. 849**

**A BILL**

To support programs for mosquito-borne and other  
vector-borne disease surveillance and control.

May 1, 2017

Reported with an amendment