

109<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# S. 4086

To improve data collection efforts with respect to the safety of pregnant women and unborn children in motor vehicle crashes, provide for research and development of appropriate countermeasures, educate the public regarding motor vehicle safety risks affecting pregnant women and unborn children, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

DECEMBER 6, 2006

Mr. DEWINE introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

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## A BILL

To improve data collection efforts with respect to the safety of pregnant women and unborn children in motor vehicle crashes, provide for research and development of appropriate countermeasures, educate the public regarding motor vehicle safety risks affecting pregnant women and unborn children, 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 “Maternal Motor Vehi-  
5       cle Crash Safety Act of 2006”.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) ADMINISTRATOR.—The term “Adminis-  
4 trator” means the Administrator of the National  
5 Highway Traffic Safety Administration.

6 (2) APPROPRIATE CONGRESSIONAL COMMIT-  
7 TEES.—The term “appropriate congressional com-  
8 mittees” means the Committee on Appropriations  
9 and Committee on Commerce, Science, and Trans-  
10 portation of the Senate and the Committee on Ap-  
11 propriations and the Committee on Energy and  
12 Commerce of the House of Representatives.

13 (3) BIOFIDELIC.—The term “biofidelic” means  
14 having the property of responding to and being im-  
15 pacted by crash and other external forces in a man-  
16 ner directly consistent with the way in which a live  
17 human being would respond to and be impacted by  
18 such forces.

19 (4) DATA LINKAGE SYSTEM.—The term “data  
20 linkage system” means an information system that  
21 is capable of accurately tracking adverse health ef-  
22 fects and birth outcomes for pregnant women who  
23 are occupants of a motor vehicle that is involved in  
24 a crash and the unborn children of such women,  
25 through the connection and analysis of multiple data  
26 sources.

1           (5) UNBORN CHILD.—The term “unborn child”  
2           means a member of the species homo sapiens, at any  
3           stage of development, who is carried in the womb.

4 **SEC. 3. FINDINGS.**

5           Congress makes the following findings:

6           (1) Injuries are the leading cause of pregnancy-  
7           associated deaths in the United States.

8           (2) Motor vehicle crashes are the leading cause  
9           of injury deaths in women of reproductive age and  
10          the leading cause of injury hospitalizations among  
11          pregnant women.

12          (3) Studies have indicated that motor vehicles  
13          are estimated to account for up to 80 percent of in-  
14          jury related deaths among unborn children.

15          (4) Transportation Research Board publications  
16          indicate that deaths among unborn children due to  
17          motor vehicle crashes are more frequent than several  
18          notable fatal childhood injuries, including bicycle re-  
19          lated deaths in children aged 0 through 15, firearm  
20          related deaths in children aged 0 through 9, and  
21          motor vehicle crash related deaths in children aged  
22          0 through 1.

23          (5) Studies suggest that approximately 3 per-  
24          cent of all babies born in the United States are in-  
25          volved in a motor vehicle crash while in utero.

1           (6) Studies have shown that elevated risks of  
2 birth-related threats and obstetric complications fol-  
3 lowing crashes involving pregnant women include—

4                   (A) premature childbirth;

5                   (B) low birth weight;

6                   (C) placental injury;

7                   (D) uterine rupture; and

8                   (E) amniotic rupture.

9           (7) Despite advances in vehicle safety, pregnant  
10 women have not received the special attention and  
11 consideration needed to understand, reduce, and pre-  
12 vent the risks of adverse pregnancy outcomes related  
13 to crashes.

14           (8) There is a need for more research and ap-  
15 plication using anthropometric test devices and com-  
16 puterized modeling systems that represent pregnant  
17 women during all stages of pregnancy.

18           (9) During pregnancy, the risks of traumatic  
19 injury to a woman is shared by the woman's unborn  
20 child. Assessing the magnitude and characteristics of  
21 those risks through data linkage systems, comparing  
22 the risks to other injuries and diseases, and reducing  
23 them, are important unmet challenges for improving  
24 maternal and child health.

1           (10) A better understanding is needed about  
2 what can happen during, and after, a pregnant  
3 woman is involved in a motor vehicle crash. This in-  
4 cludes the effects of a crash on the mother, the un-  
5 born child, and the delicate physiological balance be-  
6 tween the mother and child that separates healthy  
7 from unhealthy pregnancies, including the effects of  
8 maternal physiologic adaptations to trauma, fluid  
9 loss and shock, effects from maternal stress, effects  
10 from diagnostic regimens, medical or surgical proce-  
11 dures, or the wide variety of prescription medicines,  
12 and other medication taken by the mother.

13           (11) Despite the importance of the health of  
14 mothers and unborn children involved in motor vehi-  
15 cle crashes, agencies and data linkage systems re-  
16 sponsible for tracking motor vehicle injuries, deaths,  
17 and other measures of adverse outcome rarely cap-  
18 ture pregnancy status.

19           (12) Existing data collection and analysis sys-  
20 tems generally do not count unborn children involved  
21 in motor vehicle crashes and do not follow them  
22 after their birth to ascertain the effects of the crash  
23 on long-term neuro-developmental and functional  
24 outcomes.

1 **SEC. 4. SENSE OF CONGRESS ON IMPROVEMENTS TO THE**  
2 **NATIONAL AUTOMOTIVE SAMPLING SYSTEM**  
3 **CRASHWORTHINESS DATA SYSTEM.**

4 It is the sense of Congress that the Administrator—

5 (1) should continue to include in the National  
6 Automotive Sampling System Crashworthiness Data  
7 System maintained by the Administrator data re-  
8 lated to motor vehicle crashes that involved a preg-  
9 nant women; and

10 (2) should identify other means to advance the  
11 current level of understanding regarding the num-  
12 ber, nature, and impact of motor vehicle crashes in-  
13 volving pregnant women and their unborn children  
14 through data collection, data linkage systems, and  
15 analysis systems.

16 **SEC. 5. GRANTS FOR DATA LINKAGE SYSTEMS PROGRAMS.**

17 (a) IN GENERAL.—The Administrator shall, in con-  
18 sultation with appropriate officials of State agencies or  
19 public health organizations, carry out a program to pro-  
20 vide grants and other incentives, including technical as-  
21 sistance to eligible entities for the purpose described in  
22 subsection (b).

23 (b) PURPOSE.—A grant or other incentive provided  
24 under this section shall be used to promote the develop-  
25 ment of data linkage systems described in subsection (e).

1 (c) ELIGIBLE ENTITY.—In this section, the term “el-  
2 ible entity” means an academic, public health, or trans-  
3 portation safety organization or a State or local govern-  
4 ment agency that the Administrator determines is appro-  
5 priate to receive a grant or incentive under this section.

6 (d) APPLICATION AND AWARD PROCESS.—

7 (1) APPLICATIONS.—Each eligible entity seek-  
8 ing a grant under this section shall submit an appli-  
9 cation to the Administrator at such time and in such  
10 manner as the Administrator may require.

11 (2) AWARDS.—Not later than 180 days after  
12 the date of the enactment of this Act, the Adminis-  
13 trator shall establish—

14 (A) the criteria for awarding a grant or in-  
15 centive under this section; and

16 (B) a competitive, merit-based process to  
17 select applications to receive a grant or incen-  
18 tive under this section.

19 (3) PUBLICATION.—Not later than 180 days  
20 after the date of the enactment of this Act, the Ad-  
21 ministrator shall publish in the Federal Register the  
22 criteria and process described in paragraph (2).

23 (e) PROGRAM STRUCTURE.—The data linkage sys-  
24 tems eligible to receive assistance under this section are  
25 systems that use the following sources:

1           (1) State and local vital statistics databases, in-  
2           cluding birth, infant, and death records.

3           (2) State and local crash and driver's license  
4           records.

5           (3) Other computerized health records as avail-  
6           able, including emergency medical services reports  
7           and hospital and emergency room admission and dis-  
8           charge records.

9           (f) EXISTING DATA SYSTEMS.—To the maximum ex-  
10          tent possible, the Administrator shall integrate the grant  
11          and incentive program carried out under this section with  
12          the existing State specific Crash Outcome Data Evalua-  
13          tion Systems carried out by the Administrator to utilize  
14          the capabilities, linkage expertise, and organizational rela-  
15          tionships of such Systems to provide a foundation for im-  
16          proving the tracking of adverse health effects and birth  
17          outcomes for pregnant women who are occupants of a  
18          motor vehicle at the time of a crash and their unborn chil-  
19          dren.

20          (g) DATA SECURITY AND PRIVACY.—In carrying out  
21          this section, the Administrator and any eligible entity se-  
22          lected to receive a grant or incentive under this section  
23          for a data linkage system shall ensure that personal identi-  
24          fiers and other information utilized in that data linkage  
25          system related to a specific individual is handled in a man-



1 ner consistent with all applicable Federal, State, and local  
2 laws and regulations and to ensure the confidentiality of  
3 such information, and in the manner necessary to prevent  
4 the theft, manipulation, or other unlawful or unauthorized  
5 use of personal information contained in data sources used  
6 for linkage studies.

7 (h) AUTHORIZATION OF APPROPRIATIONS.—

8 (1) IN GENERAL.—There are authorized to be  
9 appropriated \$2,500,000 for each of the fiscal years  
10 2007, 2008, 2009, and 2010 to carry out this sec-  
11 tion.

12 (2) AVAILABILITY OF FUNDS.—Funds appro-  
13 priated pursuant to the authorization of appropria-  
14 tions in paragraph (1) shall remain available until  
15 expended.

16 **SEC. 6. SAFETY RESEARCH PROGRAM AND NATIONAL CON-**  
17 **FERENCE.**

18 (a) SAFETY RESEARCH PROGRAM.—

19 (1) REQUIREMENT TO CONDUCT.—The Admin-  
20 istrator shall conduct a research program as de-  
21 scribed in this section to promote the health and  
22 safety of pregnant women who are involved in motor  
23 vehicle crashes and of their unborn children.

24 (2) HIGH PRIORITY RESEARCH AREAS.—In car-  
25 rying out the research program under this section,

1 the Administrator shall place a high priority on con-  
2 ducting research to—

3 (A) investigate methods to maximize the  
4 injury prevention performance of standard 3-  
5 point safety belts for pregnant women during  
6 all stages of pregnancy;

7 (B) analyze the effectiveness of tech-  
8 nologies designed to modify or extend the safety  
9 performance of 3-point safety belts for pregnant  
10 women across a range of pregnancy phases, in-  
11 cluding technologies currently available in the  
12 marketplace;

13 (C) develop biofidelic, anthropometric test  
14 devices that are representative of pregnant  
15 women during all stages of pregnancy; and

16 (D) develop biofidelic, computer models  
17 that are representative of pregnant women dur-  
18 ing all stages of pregnancy to aid in under-  
19 standing crash forces relevant to the safety of  
20 pregnant women and unborn children that may  
21 include the utilization of existing modeling sys-  
22 tems developed by private and academic institu-  
23 tions, if appropriate.

24 (b) NATIONAL CONFERENCE.—

1           (1) REQUIREMENT TO CONVENE.—Not later  
2 than 18 months after the date of the enactment of  
3 this Act, the Administrator, in consultation with the  
4 heads of other appropriate Federal agencies, shall  
5 convene a national research conference for the pur-  
6 pose of identifying critical scientific issues for re-  
7 search on the safety of pregnant women involved in  
8 motor vehicle crashes and their unborn children.

9           (2) PURPOSE OF THE CONFERENCE.—The pur-  
10 pose of the conference required by paragraph (1)  
11 shall be to establish and prioritize a list of research  
12 questions to guide future research related to the  
13 safety of pregnant women involved in motor vehicle  
14 crashes and their unborn children.

15           (3) AUTHORITY TO PARTNER WITH OTHER OR-  
16 GANIZATIONS.—The Administrator is authorized to  
17 carry out the conference required by paragraph (1)  
18 in a partnership with organizations recognized for  
19 expertise related to the research described in para-  
20 graph (2).

21           (c) REPORT REQUIRED.—Not later than 2 years  
22 after the date of the enactment of this Act, the Adminis-  
23 trator shall submit to the appropriate congressional com-  
24 mittees a report that describes—

1           (1) the research program carried out by the Ad-  
2           ministration pursuant to subsection (a), including  
3           any findings or conclusions associated with such re-  
4           search program; and

5           (2) the priorities established at the national  
6           conference required by subsection (b), plans for reg-  
7           ulations or future programs, or factors limiting the  
8           effectiveness of such research.

9           (d) AUTHORIZATION OF APPROPRIATIONS.—

10           (1) IN GENERAL.—For each of the fiscal years  
11           2007, 2008, and 2009, there are authorized to be  
12           appropriated such sums as necessary to carry out  
13           this section.

14           (2) AVAILABILITY OF FUNDS.—Funds appro-  
15           priated pursuant to the authorization of appropria-  
16           tions in paragraph (1) shall remain available until  
17           expended.

18   **SEC. 7. PUBLIC OUTREACH AND EDUCATION.**

19           (a) IN GENERAL.—The Administrator shall conduct  
20           a public outreach and education program to increase  
21           awareness of the unique safety risks associated with motor  
22           vehicle crashes for pregnant women and the unborn chil-  
23           dren of such women and of the methods available to re-  
24           duce such risks. Such program shall include making infor-

1 mation regarding the injury-prevention value of proper  
2 safety belt and airbag use available to the public.

3 (b) TARGETED OUTREACH.—The Administrator shall  
4 carry out the program described in subsection (a) in a  
5 manner that utilizes media and organizational partners to  
6 effectively educate pregnant women, ensure an overall edu-  
7 cational impact, and efficiently utilize the program’s re-  
8 sources.

9 (c) PROGRAM INITIATION AND DURATION.—The Ad-  
10 ministrator shall initiate the program described in sub-  
11 section (a) not later than 12 months after the date of the  
12 enactment of this Act, and shall maintain such program  
13 for not less than 24 months, subject to the availability  
14 of funds.

15 **SEC. 8. INCLUSION OF SAFETY DATA IN ANNUAL ASSESS-**  
16 **MENT.**

17 (a) IN GENERAL.—Subject to subsection (b), the Ad-  
18 ministrator shall include a discussion of data regarding  
19 the safety of pregnant women who are involved in motor  
20 vehicle crashes and of their unborn children, including any  
21 relevant trends in such data, in each of the Annual Assess-  
22 ment of Motor Vehicle Crashes published by the National  
23 Center for Statistics and Analysis of the National High-  
24 way Traffic Safety Administration or an equivalent publi-  
25 cation of such Center.

1 (b) REPORT TO CONGRESS.—If the Administrator de-  
2 termines that including the information described in sub-  
3 section (a) in the Annual Assessment of Motor Vehicle  
4 Crashes or an equivalent publication is not feasible, the  
5 Administrator shall submit a report to the appropriate  
6 congressional committees not later than 60 days after the  
7 date of the release of such Annual Assessment or equiva-  
8 lent publication that states the reasons that it was not  
9 feasible to include such information and an analysis of the  
10 steps necessary to make such information available in the  
11 future.

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