

**Calendar No. 404**

116TH CONGRESS }  
*2d Session* }

SENATE

{ REPORT  
116-204

HELPING OVERCOME TRAUMA FOR CHILDREN ALONE IN REAR SEATS ACT OF 2019

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R E P O R T

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND  
TRANSPORTATION

ON

S. 1601



JANUARY 13, 2020.—Ordered to be printed

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U.S. GOVERNMENT PUBLISHING OFFICE

99-010

WASHINGTON : 2020

SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

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### HELPING OVERCOME TRAUMA FOR CHILDREN ALONE IN REAR SEATS ACT OF 2019

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JANUARY 13, 2020.—Ordered to be printed  
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Mr. WICKER, from the Committee on Commerce, Science, and  
Transportation, submitted the following

### R E P O R T

[To accompany S. 1601]

[Including cost estimate of the Congressional Budget Office]

The Committee on Commerce, Science, and Transportation, to which was referred the bill (S. 1601) to direct the Secretary of Transportation to issue a rule requiring all new passenger motor vehicles to be equipped with a child safety alert system, and for other purposes, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

#### PURPOSE OF THE BILL

The Helping Overcome Trauma for Children Alone in Rear Seats (HOT CARS) Act of 2019 is intended to help reduce the instances of child vehicular heatstroke-related deaths by directing a rule-making to require passenger vehicles to be equipped with an alert system reminding caregivers to check the rear seat before exiting the vehicle. This legislation also provides for increased education efforts on the dangers of leaving an unattended passenger in a vehicle.

#### BACKGROUND AND NEEDS

Heatstroke is the leading cause of non-crash, vehicle-related deaths in children under age 15. More than 800 children have died due to vehicular heatstroke since 1998, including more than 17 in

Mississippi.<sup>1</sup> On average, there are 38 confirmed child deaths annually,<sup>2</sup> and, in 2018, 54 children died of heat-related deaths in vehicles, a record number.<sup>3</sup> In more than half of these deaths, the caregiver unknowingly left the child in the vehicle and 28 percent were due to the child independently accessing the vehicle.<sup>4</sup> Therefore, many of these deaths could be prevented.

Tragically, heatstroke can occur across the Nation and to anyone. Research has shown that young children are significantly more vulnerable to the increase in temperatures when compared to adults.<sup>5</sup> According to the American Academy of Pediatrics (AAP), a child's body heats up three to five times faster than an adult's body.<sup>6</sup> Outside researchers consulted by Consumer Reports reported the threshold for heatstroke is when the internal body reaches 104 degrees Fahrenheit, but a child is severely at risk of death when the body reaches 107 degrees Fahrenheit.<sup>7</sup> One study found that within just 10 minutes the temperature in a vehicle can rise up to 20 degrees Fahrenheit.<sup>8</sup> In addition, contrary to popular belief, cracking a window or residual cooling from air conditioning that was previously turned on makes little to no difference once the vehicle is turned off.<sup>9</sup> Given the fast rate of temperature increase, vehicle heatstroke can occur with outside temperatures as low as 57 degrees.<sup>10</sup> As a result, vehicular heatstroke-related deaths have occurred in all States, except Alaska, Vermont, and New Hampshire.<sup>11</sup> While heatstroke is not time or place specific, most hyperthermia deaths occur during summer months when temperatures are the highest.<sup>12</sup>

To tackle vehicle heatstroke-related deaths, NHTSA launched its first national safety campaign entitled, "Where's Baby? Look Before You Lock" in April 2012.<sup>13</sup> The campaign focuses on educating the

<sup>1</sup>Null, Jan, "Heatstroke Deaths of Children in Vehicles: Deaths by State," Department of Meteorology and Climate Science, San José State University, San José, California, April 20, 2019 (<https://www.noheatstroke.org/state.htm>).

<sup>2</sup>"Heatstroke," Kids and Cars, April 2019 (<https://www.kidsandcars.org/how-kids-get-hurt/heat-stroke/>). See also "Child Vehicular Heatstroke Fatalities (1990–2018)," Kids and Cars, September 2019 (<https://www.kidsandcars.org/wp-content/uploads/2019/09/heatstroke-map.pdf>) (noting that the total number of deaths listed "should be considered an undercount of the actual number of child vehicular heatstroke fatalities due to no official state data collection systems").

<sup>3</sup>Ibid. See also "112 Animal Companions Endured Heat-Related Deaths in 2018 ... That We Know Of," People for the Ethical Treatment of Animals (PETA), September 25, 2019 (<https://www.peta.org/features/dogs-and-other-companion-animals-suffer-heat-related-deaths/>).

<sup>4</sup>"Heatstroke," Kids and Cars, April 2019 (<https://www.kidsandcars.org/how-kids-get-hurt/heat-stroke/>).

<sup>5</sup>"Look Before You Lock: Fact Sheet," Kids and Cars, 2019 (<http://www.kidsandcars.org/wp-content/uploads/2019/04/Heatstroke-fact-sheet-2019.pdf>).

<sup>6</sup>"Prevent Child Deaths in Hot Cars," American Academy of Pediatrics (AAP), July 18, 2018 (<https://www.healthychildren.org/English/safety-prevention/on-the-go/Pages/Prevent-Child-Deaths-in-Hot-Cars.aspx>).

<sup>7</sup>"Hot Car Fatalities Are a Year-Round Threat to Children and Pets: CR's Testing Shows It Doesn't Take Hot Weather for Kids to Wind Up in Danger." Consumer Reports, July 31, 2019 (<https://www.consumerreports.org/car-safety/hot-car-fatalities-year-round-threat-to-children-pets-heat-stroke/>).

<sup>8</sup>Willingham, A.J., "More Than 36 Kids Die in Hot Cars Every Year and July Is Usually the Deadliest Month," CNN, July 20, 2018 (<https://www.cnn.com/2018/07/03/health/hot-car-deaths-child-charts-graphs-trnd/index.html>).

<sup>9</sup>"Prevent Child Deaths in Hot Cars," AAP, July 18, 2018 (<https://www.healthychildren.org/English/safety-prevention/on-the-go/Pages/Prevent-Child-Deaths-in-Hot-Cars.aspx>).

<sup>10</sup>Ibid.

<sup>11</sup>"Child Vehicular Heatstroke Fatalities (1990–2018)," Kids and Cars, April 2019 (<http://www.kidsandcars.org/wp-content/uploads/2019/05/heatstroke-19-map.pdf>).

<sup>12</sup>Willingham, A.J., "More Than 36 Kids Die in Hot Cars Every Year and July Is Usually the Deadliest Month," CNN, July 20, 2018 (<https://www.cnn.com/2018/07/03/health/hot-car-deaths-child-charts-graphs-trnd/index.html>).

<sup>13</sup>Department of Transportation, National Highway Traffic Safety Administration, "Where's Baby? Look Before You Lock' Campaign Warns About the Dangers of Heatstroke for Kids in

public to the dangers of leaving children unattended in deactivated vehicles and provides effective preventative measures that caregivers can implement in order to decrease incidents.<sup>14</sup> NHTSA further engaged the public on July 31, 2018, for National Heatstroke Prevention Day by hosting a tweetup where the agency posted statistics, prevention tips, and heatstroke awareness messages every 15 minutes on all social media platforms in order to spread the word and remind parents about vehicular child safety.<sup>15</sup>

While education is important to this effort, technology provides a much stronger solution to warn caregivers. GM,<sup>16</sup> Nissan,<sup>17</sup> and Hyundai/Kia<sup>18</sup> vehicles deployed some systems to alert the driver to check the back seat for remaining passengers when the vehicle is turned off. In addition, the European New Car Assessment Programme (Euro NCAP), a 5-star safety rating system in Europe to assess the safety standards of various vehicles, has included child detection systems in its assessment process.<sup>19</sup> Starting in 2022, Euro NCAP is expected to award manufacturers that include the safety feature in new vehicles. Despite the initial action from the industry and international bodies, NHTSA is not expected to initiate a rulemaking to require this technology in the near future.

#### SUMMARY OF PROVISIONS

S. 1601 would do the following:

- Direct the Department of Transportation (DOT) to issue a final rule requiring new passenger vehicles to be equipped with a visual and auditory alert system to remind caregivers to check the rear seat.
- Require States to use a portion of their highway safety program funds to educate the public on the risks of leaving a child or unattended passenger in a vehicle.
- Require DOT to undertake a third-party study on retrofitting existing passenger motor vehicles.

#### LEGISLATIVE HISTORY

S. 1601 was introduced on May 22, 2019, by Senator Wicker (for himself and Senators Blumenthal and Cantwell) and was referred to the Committee on Commerce, Science, and Transportation of the Senate. Senators Schumer, McSally, Markey, Feinstein, Smith,

Cars,” April 3, 2012 (<https://usdotblog.typepad.com/secretarysblog/2012/04/wheres-baby-look-before-you-lock-psa-warns-about-the-dangers-of-hyperthermia-in-cars.html#.XREAqI5KjmE>).

<sup>14</sup>Id.

<sup>15</sup>Department of Transportation, National Highway Traffic Safety Administration, “Consumer Advisory: Heatstroke Prevention Day—July 31,” July 30, 2018 (<https://www.nhtsa.gov/press-releases/consumer-advisory-heatstroke-prevention-day-july-31>).

<sup>16</sup>“GMC Leads Industry with New Rear Seat Reminder: All-new 2017 GMC Acadia Introduces Industry-first Feature to Help Busy Drivers,” GMC Pressroom, June 13, 2016 (<https://media.gmc.com/media/us/en/gmc/vehicles/acadia/2017.detail.html/content/Pages/news/us/en/2016/jun/0613-rear-seat-reminder.html>).

<sup>17</sup>Thomas, Emily A., Ph.D., “Nissan Rear Door Alert Aims to Prevent Child Deaths in Hot Cars: Consumer Reports’ Evaluation Shows That the New Alert Has Merit But Could Use Improvements,” Consumer Reports, July 31, 2018 (<https://www.consumerreports.org/car-safety/nissan-rear-door-alert-aims-to-prevent-child-deaths-in-hot-cars/>).

<sup>18</sup>Monticello, Mike, “2019 Hyundai Santa Fe Rear Occupant Alert Aims to Protect Kids from Hot Cars: The Safety System Adds Ultrasonic Motion Sensors to Detect Children Left in the Rear Seat, But Only If Car Doors Are Locked,” Consumer Reports, July 31, 2018 (<https://www.consumerreports.org/car-safety/hyundai-santa-fe-rear-occupant-alert-aims-to-protect-kids-from-hot-cars/>).

<sup>19</sup>“Euro NCAP 20/25 Roadmap: In Pursuit of Vision Zero,” Euro NCAP, September 2017, pg. 11 (<https://cdn.euroncap.com/media/30700/euroncap-roadmap-2025-v4.pdf>).

Gillibrand, and Brown are additional cosponsors. On July 10, 2019, the Committee met in open Executive Session and, by voice vote, ordered the bill to be reported favorably without amendment.

In the 115th Congress, similar legislation, S. 1666, Helping Overcome Trauma for Children Alone in Rear Seats Act of 2017, was introduced on July 27, 2017, by Senator Blumenthal (for himself and Senator Franken) and referred to the Committee on Commerce, Science and Transportation of the Senate. Senator Wicker was an additional cosponsor. A version of that bill was adopted by the Committee as part of the AV START Act in October 2017.

Additional similar legislation in the 115th Congress, H.R. 2801, Helping Overcome Trauma for Children Alone in Rear Seats Act, was introduced on June 7, 2017, by Representative Tim Ryan (for himself and Representatives King [R-NY] and Schakowsky [D-IL]) and was referred to the Committees on Energy and Commerce, and Transportation and Infrastructure of the House of Representatives. There were 22 additional cosponsors. A version of that bill was included in the SELF DRIVE Act, which passed the House of Representatives by voice vote on September 6, 2017.

The Subcommittee on Consumer Protection and Commerce of the Committee on Energy and Commerce of the House of Representatives held a hearing on May 23, 2019, entitled, "Summer Driving Dangers: Exploring Ways to Protect Drivers and Their Families." This hearing discussed the technological solutions to prevent hot car deaths and other motor vehicle accidents.

#### ESTIMATED COSTS

In accordance with paragraph 11(a) of rule XXVI of the Standing Rules of the Senate and section 403 of the Congressional Budget Act of 1974, the Committee provides the following cost estimate, prepared by the Congressional Budget Office:

<b>S. 1601, HOT CARS Act of 2019</b>			
As ordered reported by the Senate Committee on Commerce, Science, and Transportation on July 10, 2019			
By Fiscal Year, Millions of Dollars	2019	2019-2024	2019-2029
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Deficit Effect	0	0	0
Spending Subject to Appropriation (Outlays)	0	3	not estimated
Statutory pay-as-you-go procedures apply?	No	<b>Mandate Effects</b>	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2030?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	Yes, Over Threshold

S. 1601 would require the National Highway Traffic Safety Administration (NHTSA) to issue a new regulation requiring new passenger vehicles to have a system to alert the driver to check the backseat after the engine has been shut off. The bill also would require NHTSA to contract with an independent third party to com-

plete a study on retrofitting passenger vehicles with technology to eliminate the risk of children being forgotten in the backseat. Using information from NHTSA, CBO estimates implementing those provisions would require one additional employee, several passenger vehicles for testing purposes, other equipment, and additional funds for the third-party study. In total, implementing the bill would cost \$3 million over the 2020–2024 period, CBO estimates. Such spending would be subject to the availability of appropriations.

S. 1601 also would require states that receive funding from NHTSA’s Highway Safety Grants Program to use a portion of those grants to carry out public education programs on the risks of leaving a child in a vehicle that has been turned off. Those grants are funded by contract authority (a form of mandatory budget authority) and distributed to the states by formula. The bill would not authorize additional funds for those grants, and CBO expects that implementing the new public education programs would not significantly change the rate at which the NHTSA grant funds are spent by the states.

S. 1601 would impose a private-sector mandate as defined in the Unfunded Mandates Reform Act (UMRA) on manufacturers of automobiles. CBO estimates that the cost of complying with the mandate would exceed the annual threshold established in UMRA (\$164 million in 2019, adjusted annually for inflation).

Using data on vehicle sales from the Bureau of Economic Analysis, CBO estimates that manufacturers would need to install alert systems in more than 16 million motor vehicles annually. The cost of installing a system would depend on the rule to be issued by the Secretary of Transportation, which CBO expects would take effect in 2024. Although some auto manufacturers are currently installing rear-seat sensors in certain models and intend to make alert systems standard in their 2022 and 2023 models, CBO expects most auto manufacturers will have to develop or purchase rear-seat alert technology to comply with the department’s rule. Therefore, CBO estimates that automobile manufacturers would incur several hundred million dollars in costs to comply with the mandate when it takes effect in 2024 and in each of the following four years.

The bill contains no intergovernmental mandates as defined in UMRA.

The CBO staff contacts for this estimate are Robert Reese (for federal costs) and Brandon Lever (for mandates). The estimate was reviewed by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

#### REGULATORY IMPACT STATEMENT

In accordance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee provides the following evaluation of the regulatory impact of the legislation, as reported:

#### NUMBER OF PERSONS COVERED

S. 1601, as reported, would impose new guidelines and requirements for passenger vehicle manufacturers and States currently subject to the Secretary’s oversight, and therefore the number of persons covered would be consistent with existing law.

## ECONOMIC IMPACT

S. 1601 is not expected to have a negative impact on the Nation's economy as the Committee expects any burden by the additional requirements would be balanced by the benefits of reducing the number of deaths and injuries due to vehicular heatstroke.

## PRIVACY

S. 1601 is not expected to have an adverse impact on the personal privacy of individuals.

## PAPERWORK

S. 1601 would not require new reporting requirements on regulated entities, but would require the Secretary to promulgate a final rule requiring passenger vehicles to be equipped with an alert system reminding caregivers to check the rear seat before exiting the vehicle, as well as report to Congress on the results of a third-party study on retrofitting existing passenger motor vehicles.

## CONGRESSIONALLY DIRECTED SPENDING

In compliance with paragraph 4(b) of rule XLIV of the Standing Rules of the Senate, the Committee provides that no provisions contained in the bill, as reported, meet the definition of congressionally directed spending items under the rule.

## SECTION-BY-SECTION ANALYSIS

*Section 1. Short title.*

This section would provide that the bill may be cited as the "Helping Overcome Trauma for Children Alone in Rear Seats Act of 2019" or "HOT CARS Act of 2019."

*Section 2. Child safety.*

This section would direct the Secretary to issue a final rule within 2 years requiring new passenger vehicles to be equipped with a visual and auditory alert system to remind caregivers to check the rear seat.

It also would require a portion of the States' highway safety program funds to be allocated toward education on the risks of leaving children unattended in deactivated motor vehicles.

Finally, the section would require the Secretary to enter into an agreement with an independent third-party within a specified timeline to conduct a study on retrofitting existing passenger motor vehicles. The Secretary would be required to submit a report to the relevant Committees on the results of the third-party study.

## CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new material is printed in italic, existing law in which no change is proposed is shown in roman):



TITLE 23—HIGHWAYS

CHAPTER 4—HIGHWAY SAFETY

§ 402. Highway safety programs

(a) \* \* \*

(l) UNATTENDED PASSENGERS.—

(1) IN GENERAL.—Each State shall use a portion of the amounts it receives under this section to carry out a program to educate the public on the risks of leaving a child or unattended passenger in a vehicle after the vehicle motor is deactivated by the operator.

(2) PROGRAM PLACEMENT.—A State does not need to carry out the program described in paragraph (1) through the State transportation or highway safety office.

(m) \* \* \*

\* \* \* \* \*

TITLE 49—TRANSPORTATION

SUBTITLE VI—MOTOR VEHICLE AND DRIVER PROGRAMS

PART C—INFORMATION, STANDARDS, AND REQUIREMENTS

CHAPTER 323—CONSUMER INFORMATION

Sec.

32301. Definitions.

32302. Passenger motor vehicle information.

32303. Insurance information.

32304. Passenger motor vehicle country of origin labeling.

32304A. Consumer tire information.

32304A. Consumer tire information and standards.

32304B. Child safety.

32305. Information and assistance from other departments, agencies, and instrumentalities.

32306. Personnel.

32307. Investigative powers.

32308. General prohibitions, civil penalty, and enforcement.

32309. Civil penalty for labeling violations.

\* \* \* \* \*

§ 32304A. Consumer tire information and standards

(a) \* \* \*

§ 32304B. Child safety

(a) DEFINITIONS.—In this section:

(1) PASSENGER MOTOR VEHICLE.—The term “passenger motor vehicle” has the meaning given that term in section 32101.

(2) REAR DESIGNATED SEATING POSITION.—The term “rear designated seating position” means designated seating positions that are rearward of the front seat.

(3) SECRETARY.—The term “Secretary” means the Secretary of Transportation.

(b) RULEMAKING.—Not later than 2 years after the date of the enactment of the HOT CARS Act of 2019, the Secretary shall issue a final rule requiring all new passenger motor vehicles weighing less than 10,000 pounds gross vehicle weight to be equipped with a sys-

*tem to alert the operator to check rear designated seating positions after the vehicle engine or motor is deactivated by the operator.*

*(c) MEANS.—The alert required under subsection (b)—*

*(1) shall include a distinct auditory and visual alert, which may be combined with a haptic alert; and*

*(2) shall be activated when the vehicle motor is deactivated by the operator.*

*(d) PHASE-IN.—The rule issued pursuant to subsection (b) shall require full compliance with the rule beginning on September 1st of the first calendar year that begins 2 years after the date on which the final rule is issued.*