



Electronic Stability Control (ESC) Update

Number 14 (Second edition) 2008

This is an update of a Hot Topic first released in 2006
(Click [here](#) for original issue)

1 Crash involvement risks of cars with electronic stability control systems in Great Britain

Thomas P

International Journal of Vehicle Design 2006

Volume 1, Number 4, pages 267-281

This article evaluates the effectiveness of ESC using data from the Great Britain national casualty database. Data from accidents involving 8951 cars fitted with ESC is analysed.

2 Design of simulator studies to study effectiveness of electronic stability control systems

Watson GS, Papelis YE & Ahmad O

Transportation Research Record 2006

Issue 1980, pages 79-86

This paper considers the challenges involved in using simulating scenarios to test the effectiveness of ESC. The paper also presents the findings of tests carried out on the National Advanced Driving Simulator.

3 The effectiveness of electronic stability control on motor vehicle crash prevention

Green PE, Woodrooffe J

University of Michigan Transportation Research Institute, United States

Report number UMTRI-2006-12, 2006

This report analyses the effects of ESC on reducing the risk of having a loss of control accident. Data from the Fatality Analysis Reporting System (US) and General Estimates System was used.

4 The effectiveness of ESC in reducing real world crashes - a literature review

Ferguson CA

Traffic Injury Prevention 2007

Volume 8, Number 4, pages 329-338

This article summarises the findings of studies that have considered the 'real-world' effectiveness of electronic stability control. The review considers the different methodologies and variables examined in each study.

5 Effects of electronic stability control - an update

Farmer CM
Traffic Injury Prevention 2006
Volume 7, Number 4, pages 319-324

This article updates a previous article by Farmer analysing the effects of ESC in reducing single vehicle accident risk. The amount of data analysed increased by half from the previous study, allowing for cars and SUVs to be analysed separately.

6 The estimated reduction in the odds of loss-of-control type crashes for sport utility vehicles equipped with electronic stability control

Green PE, Woodrooffe J
Journal of Safety Research 2006
Volume 37, Number 5, 493-499

This study analyses the effect of ESC on loss of control accidents involving sport utility vehicles.

7 Methods for the evaluation of traffic safety effects of antilock braking system (ABS) and electronic stability control (ESC) - a literature review

Linder A, Dukic T, Hjort M, Matstoms Y, Mardh S, Sundstrom J, Vadeby A, Wiklund M, Ostlund J
Report number 580A, 2007
VTI, Sweden
Online [accessed 10 December 2007]. [Click here](#) to view

This literature review explores the methods used in studies testing vehicle safety systems, including electronic stability control. The review examines the statistical methods and testing methods used in the studies as well as driver behaviour evaluation methods.

8 Preliminary evaluation of electronic stability control effectiveness in Australasia

Scully J, Newstead S
Report number 271, 2007
Monash University Accident Research Centre, Melbourne
Online [accessed 15 November 2007]. [Click here](#) to view

This report uses crash data from Australia and New Zealand to study the effectiveness of ESC in reducing crash risk. The results of the study indicate that ESC significantly reduces the risk of involvement in a single vehicle accident, particularly for 4WDs.

9 Real world assessment of relative crash involvement rates of cars equipped with electronic stability control

Thomas P, Frampton R
20th International Technical Conference on the Enhanced Safety of Vehicles, Lyon, France, 18-21 June 2007
Online [accessed 10 December 2007]. [Click here](#) to view

This paper evaluates the crash likelihood of cars fitted with ESC.

10 The secret of electronic stability control (ESC)

Rudin-Brown CM, Burns PC
Proceedings of the Canadian Multidisciplinary Road Safety Conference XVII, 3-6 June 2007, Montreal, Quebec

This paper presents the findings of a survey of driver ESC awareness in Canada and recommends actions for promoting awareness and demand for ESC.

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