TRAFFIC INJURY RESEARCH FOUNDATION

THE ROAD SAFETY MONITOR 2013

KNOWLEDGE OF VEHICLE SAFETY FEATURES IN CANADA

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THE TRAFFIC INJURY RESEARCH FOUNDATION

The mission of the Traffic Injury Research Foundation (TIRF) is to reduce traffic-related deaths and injuries. TIRF is a national, independent, charitable road safety research institute. Since its inception in 1964, TIRF has become internationally recognized for its accomplishments in a wide range of subject areas related to identifying the causes of road crashes and developing programs and policies to address them effectively.

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KNOWLEDGE OF VEHICLE SAFETY FEATURES

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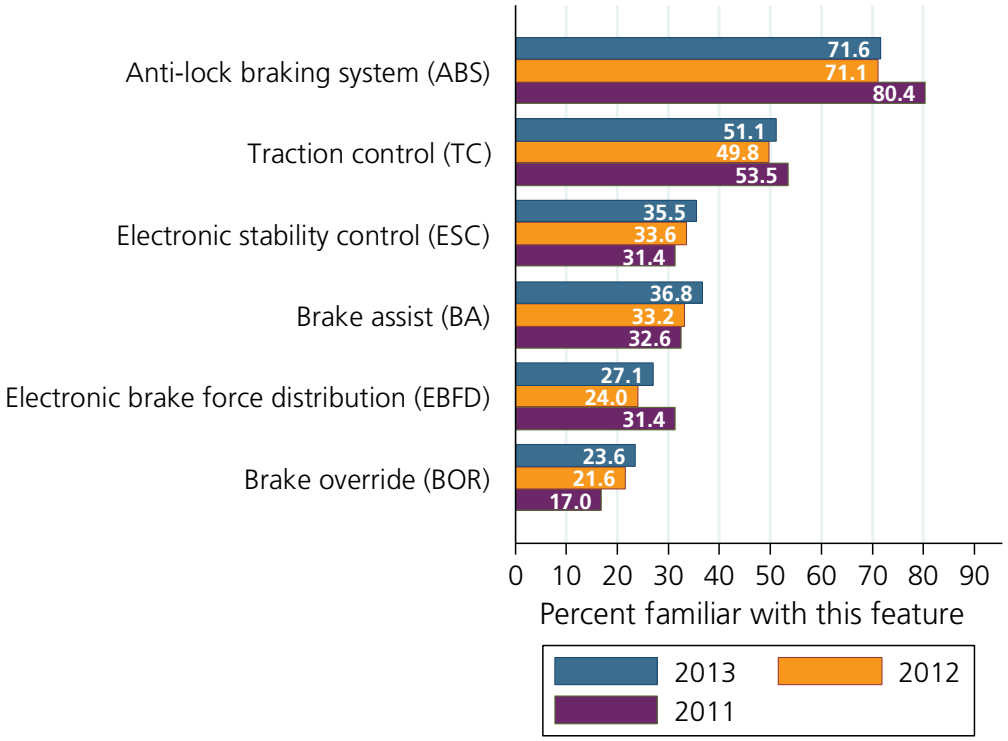
This fact sheet summarizes national results from The Road Safety Monitor (RSM), 2013 on knowledge of vehicle safety features in Canada. The RSM is an annual public opinion survey conducted by the Traffic Injury Research Foundation (TIRF) under sponsorship from Beer Canada, Toyota Canada Foundation, and Aviva. It takes the pulse of the nation on key road safety issues by means of a telephone and on-line survey of a random, representative sample of Canadian drivers.

Since 2011, in an effort to better understand gaps in driver knowledge concerning modern vehicle safety features, TIRF has collected data on driver familiarity with six important features: anti-lock brakes (ABS); brake assist (BA); brake override (BOR); electronic brake force distribution (EBFD); electronic stability control (ESC); and traction control (TC). The following results are based on an analysis of RSM 2013 data, the most recent data available. Comparisons are also made with results from previous surveys in 2011 and 2012.

How knowledgeable are Canadians about various vehicle safety features? In 2013, almost three out of four Canadian drivers reported they were familiar with ABS (71.6%) and a slight majority reported familiarity with TC (51.1%). Most drivers, however, reported limited familiarity with ESC (35.5%), BA (36.8%), EBFD (27.1%), and BOR (23.6%). These results were compared to results from the same question asked in the 2012 RSM and a 2011 TIRF study on vehicle safety features (see Robertson et al. 2012). The results from all three years are shown in Figure 1 below.

Fig. 1 Canadians familiar with safety features from 2011, 2012, and 2013

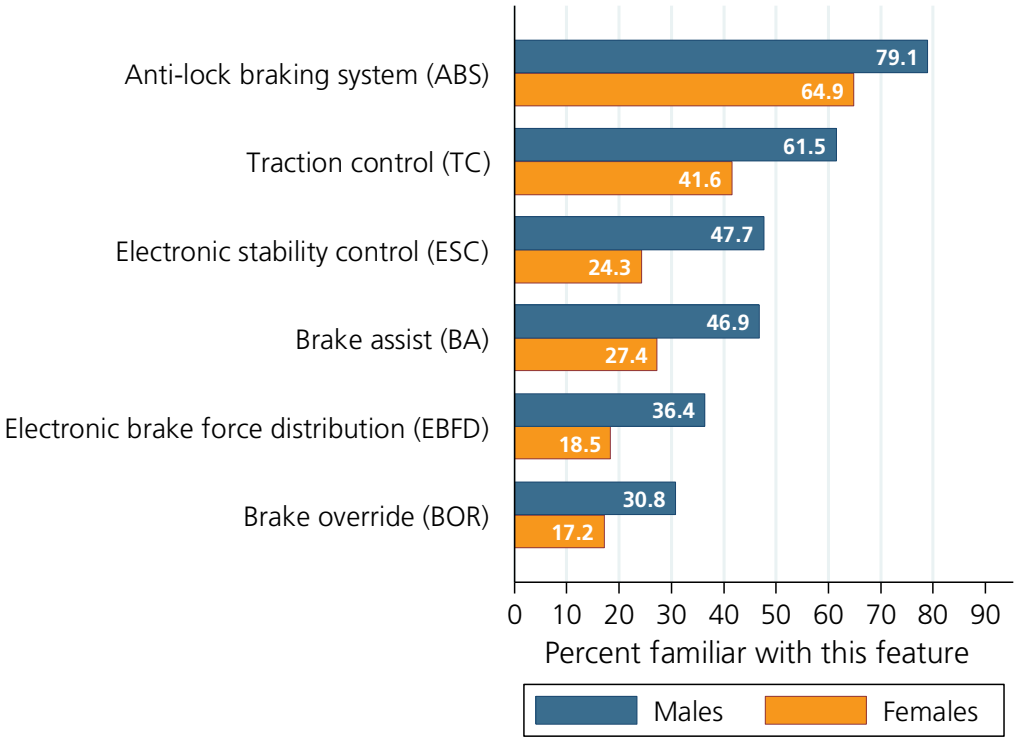


In comparison to previous surveys, the results in 2013 and 2012 for each safety feature were not significantly different from each other. However, with the exception of TC, the results in 2013 and 2011 for the remaining five features were found to be significantly different. Although the same question was used across all three surveys, the variance between results may be due to differences in the focus, level of detail collected, and the ordering of questions in these surveys. The 2011 survey was a comprehensive study of safety features, while the 2012 and 2013 RSM surveys asked questions related to only a few vehicle safety features as well as a variety of other road safety issues such as impaired driving and drugged driving. Additional years of data will be necessary to determine the presence of any trends or levelling of results. Nevertheless, all three years demonstrate similar rank-ordering of driver knowledge across the six features.

The results of the 2013 survey continue to suggest that the majority of Canadian drivers are unfamiliar with most of these vehicle safety features. The higher reported familiarity with ABS, and to a lesser extent TC, might be attributed to their being available in a wide range of vehicles for a longer time period. Nonetheless, given their history it is of concern that nearly 30% and 50% of drivers remain unfamiliar with ABS and TC, respectively.

What is the profile of Canadians who are familiar with safety features? As with previous years, the respondent's gender was consistently found to have an effect on how likely they reported being familiar with each of the six vehicle safety features. As shown in Figure 2, being male increased the likelihood of drivers reporting knowledge of all the safety features.

Fig. 2 Percent of males versus females who are familiar with each feature



An analysis of the effect of other demographic and driving-related variables across the six features was conducted. Only significant results were found as follows:

- For every ten year increase in age, the odds of being knowledgeable about ABS increased by 15.7%;
- With every 500 kilometers driven, the odds of being familiar with EBFD and BA increased by 5.7% and 4.5%, respectively; and,
- Among those injured in crashes, 57.2% were familiar with TC compared to 49.7% of respondents who had never been injured; and 42.5% of previously injured drivers reported being familiar with ESC relative to 33.9% of those never injured.

The results thus indicated that being a male was the most influential factor on driver knowledge about safety features. This finding was consistent with results from the 2011 and 2012 surveys.

Another important finding was that, with the exception of ABS, driver knowledge of safety features did not appear to differ by age. However, of the features studied, ABS was the only safety feature that has been in the market for several decades (Williams and Wells 1994). This may be revealing for several reasons. First, as stated above, the long period and widespread availibility of ABS in the market was important to familiarity with a safety feature but, second, if all features are considered equal in terms of longevity and availibility, familiarity with a feature also may be dependent upon age. Combined, this suggests that as other safety features become widespread in the market, age might become a factor as it has with ABS. Therefore, once a safety feature has been installed on the majority of vehicles for a long period of time new and young drivers still may be at a disadvantage as they lack the exposure and experience to learn about the safety feature. Future research will be required to test these possible hypotheses.

To summarize, the 2013 survey results continue to highlight that there are some groups within the driver population who are less familiar with several important vehicle safety features than other groups.

Concluding remarks. Vehicle safety features offer people important benefits that improve the road safety environment. Lack of familiarity with features, improper use of features, and dangerous driving habits all can negate or undermine their effectiveness. In order to gain the most benefits, drivers must employ safe driving habits and familiarize themselves with the specific features on their vehicles as well as understand the limitations of each feature. The combination of safe driving practices with sound knowledge and proper use of safety features will help mitigate or prevent crashes.

With ongoing advancements in technology drivers can expect to see more safety features appear on their vehicles. In an effort to improve driver knowledge about these features and safe driving habits, TIRF has created Brain on Board with funding from the Toyota Canada Foundation. This educational program provides drivers with important information and resources that explain the benefits, functions, proper use, and limitations of various features. To find out more, visit www.brainonboard.ca or our French-language site www.cerveauabord.ca.

About the poll. These results are based on the RSM, an annual public opinion poll developed and conducted by TIRF. A total of 1,201 Canadians completed the poll in October of 2013. Results can be considered accurate within plus or minus 2.8%, 19 times out of 20. The majority of the questions were answered using a scale from one to six where six indicated high agreement, concern, or support and one indicated low agreement, concern, or support. For the fifth year in a row, some respondents were contacted by phone (301 in 2013; 225 in 2012; 303 in 2011; 401 in 2010; 600 in 2009) and some on-line (900 in 2013; 678 in 2012; 905 in 2011; 800 in 2010; 600 in 2009).

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