



## Effective Public Health Practice Project Summary Statement

December 2005

This is a summary statement written to condense the work of the authors of a systematic review. The reference for the full review is below. The intent of this summary is to provide an overview of the findings and implications of the full review. For more information on individual studies included in the review, please see the review itself.

**Reference for Review in APA:** Roberts, I., Kwan, I., and the Cochrane Injuries Group Driver Education Reviewers (2005). **School based driver education for the prevention of traffic crashes (Review).** In: *The Cochrane Library*, Issue 3, 2005. John Wiley & Sons, Ltd.

**Issue:** In Ontario in 2003, drivers aged 16 to 20 years accounted for 7.0% of license holders but accounted for 12% of driver fatalities and 15.2% of driver injuries due to motor vehicle collisions (Ontario Ministry of Transportation, 2005). Education for young drivers is a popular strategy for combating the disproportionately higher rate of motor vehicle traffic accidents among youth and has the support of both the public and government. In a recent survey, 84% of Canadians supported mandatory driver education for young drivers (Beirness, Mayhew, Simpson & Desmond, 2004). To encourage driver education, the Ontario Ministry of Transportation has approved a number of beginner driver education courses and successful completion of these courses may qualify G1 license holders for a four month reduction in the 12 month minimum G1-licensing period as well as a potential reduction in insurance premiums (Ontario Ministry of Transportation, 2004).

**Review Content Summary:** A systematic review with meta-analysis was conducted to assess the effectiveness of school-based driver education in preventing motor vehicle collisions among young drivers. Six different driver education programs, ranging from 7 to 72 hours of instruction, were evaluated in three randomised trials. In two trials, the control groups received no formal driver education program but could access driver instruction on their own; in the third trial, control group participants were left to their own devices to learn how to drive. When data on self- and police-reported motor vehicle traffic accidents were pooled for all three studies, no overall effect of driver education on accident rate was detected. There was some evidence that school-based driver education leads to early licensing.

**Comments on this review's methodology:** The TRANSPORT, TRANSDOC and MEDLINE databases were searched for the period from 1968 to 2000 for studies that met the following inclusion criteria: randomised controlled trials, compared school-based driver education to no driver education, participants were aged 15 to 24 years and had not yet obtained a driver's license, and outcome measures included driver licensing, road traffic crashes or road related injuries (fatal and non-fatal). Search strategies were reported for each database and searches were not limited by language. Data were independently extracted by two reviewers. Rates of

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non-school based driver education in the control groups were not reported in the review. There was no significant heterogeneity among trials.

**Evidence points ARE NOT weighted or ranked according to strength**

<b>What's the evidence?</b>	<b>Implications for practice and policy:</b>
<p>&gt; There is evidence from one large randomised trial, with 16,338 participants, that school-based driver education leads to a small but statistically significant increase in early licensing rate; 87% of the intervention group and 84% of the control group obtained their drivers license.</p>	<p>&gt; More research is needed to determine if young drivers who obtain licenses directly after driver education are at an increased risk for motor vehicle crashes.</p>
<p>&gt; A pooled analysis of data from three randomised trials (N=17,868) did not detect a significant decrease in motor vehicle crashes among young drivers with school-based driver education.</p>	<p>&gt; Driver education cannot be a mainstay of driver safety initiatives and needs to be combined with strategies that are known to reduce the incidence of motor vehicle traffic accidents among young drivers. In Ontario, preliminary results from the Graduated Licensing Program suggest that this strategy may be an effective intervention for young drivers (Boase &amp; Tasca, 1998).</p> <p>&gt; The driver education programs included in the three studies varied in the amount of time spent on classroom instruction and driving instruction. More research is needed to determine if driver education programs need to meet any minimum standards for classroom instruction and driving instruction in order to be effective.</p>
<p><b>General Implications: School-based driver education for young drivers does not decrease the incidence of motor vehicle collisions and as such cannot be relied upon as the mainstay of traffic accident prevention initiatives for youth. School-based driver education may lead to early licensing. High-quality research is needed to determine if early licensing leads to an increased risk for motor vehicle collisions.</b></p>	

**Cost Benefit or Cost-Effectiveness Information:** Not included in review.

**References Used to Outline Issue:**

Beirness, D. J., Mayhew, D. R., Simpson, H. M., Desmond, K. (2004). *The Road Safety Monitor 2004: Young Drivers*. Ottawa: Traffic Injury Research Foundation.

Boase, P., & Tasca, L. (1998). *Graduated licensing system evaluation – Interim report 1998*. Toronto: Safety and Policy Branch, Ontario Ministry of Transportation.

Ontario Ministry of Transportation (2004). Ministry approved beginner driver education courses. [www.mto.gov.on.ca/english/dandv/driver/gradu/approve.htm](http://www.mto.gov.on.ca/english/dandv/driver/gradu/approve.htm). Accessed November 16, 2005.

Ontario Ministry of Transportation (2005). *Ontario Road Safety Annual Report 2003*. Toronto: Safety and Policy Branch, Ontario Ministry of Transportation.

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