

Assessment of the Road Safety Education Program (RSEP) and the New Graduated Licensing Measures for New Drivers of Passenger Vehicles

Effects on the Road Safety Record

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Presentation Outline

- Overview of the context behind the introduction of the new measures
- Presentation of the main differences between the old and new rules for obtaining and using a first driver's licence with the implementation of the RSEP on January 17, 2010
- Assessment methodological framework developed for the purposes of our analysis
- Overall effect of the RSEP and the new graduated licensing measures on the road safety record of new drivers
- Conclusion

Overview of the Context Behind the Introduction of the New Measures

- Québec drivers aged 16 to 24 have been overrepresented for many years now in road accident statistics
 - Young people represent:
 - 10% of driver's licence holders
 - 20 to 25% of drivers involved in accidents causing bodily injury
- Research shows that the graduated licensing program reduces the risk of accidents causing bodily injury for drivers in the program
 - Québec's first graduated licensing program was introduced in 1997 and had a positive effect on the road safety record of young drivers
 - In 2006, far too many young people were still involved in accidents

Overview of the Context (cont.)

- In 2007, we reviewed the graduated licensing program in order to tighten up certain measures, with an overall aim of:
 - Preserving the mobility of new drivers
 - Increasing the severity of penalties for at-fault drivers
- Reintroduction of mandatory driving courses as of January 17, 2010
 - Revision of course content and the process of obtaining a first driver's licence
 - Maintaining education of driving rules
 - Training drivers to adopt safe, cooperative and responsible behaviour

Key Differences Between the Old and New Rules for Obtaining and Using a First Driver's Licence

Type of licence	Changes	Before January 17, 2010	As of January 17, 2010
Learner's licence	Driving course	Does not apply	Mandatory and review of the approach
Probationary licence	Validity period of the licence	24 months, or up to age 25	24 months for all new drivers
Driver's licence	Graduated demerit point brackets	Does not apply 15 demerit points for all drivers	As of June 19, 2011 <ul style="list-style-type: none"> • Under age 23: 8 demerit points • Ages 23 and 24: 12 demerit points • Ages 25 and older: 15 demerit points
	Zero alcohol for drivers under age 22	Does not apply	In effect since April 15, 2012

Assessment Methodological Framework Developed for the Purposes of Our Analysis

Assessment Methodological Framework Developed for the Purposes of Our Analysis

- **Objective:** Measure the effect of the RSEP and the new graduated licensing measures on the road safety record of new drivers
- **Method:** Before/after comparison using a control group
 - Observation of the road behaviour of new drivers since the introduction of the RSEP, compared with the behaviour of new drivers before its coming into effect
 - Take into account other changes over the same period that influence the road behaviours of all drivers, using a control group

Number of Learner Drivers of Passenger Vehicles Based on the Month and Year the Driver's Licence Was Obtained

Month	Year									
	2005 ¹	2006	2007	2008	2009	2010	2011	2012	2013	2014
January	7,125	7,426	8,121	8,419	8,529	11,342	4,395	5,403	5,917	5,617
February	7,593	7,157	8,197	8,064	8,460	725	5,208	6,371	6,129	6,069
March	8,332	8,891	9,440	7,334	9,539	3,653	6,948	7,680	7,052	7,090
April	8,692	7,542	8,151	9,532	8,924	4,196	6,237	6,740	7,609	7,209
May	4,848	9,373	9,813	8,773	8,776	4,614	6,994	7,709	8,272	7,609
June	9	8,527	8,799	7,676	9,215	5,448	7,106	7,486	7,255	7,457
July	7,459	9,589	9,918	9,722	11,384	5,196	6,868	7,687	7,947	8,054
August	12,520	11,584	11,222	9,803	11,721	5,858	7,560	8,601	8,071	7,786
September	10,531	9,421	8,691	9,013	13,185	6,686	7,717	7,770	8,038	8,222
October	10,056	10,473	10,795	10,037	14,119	7,306	8,300	9,283	9,498	9,653
November	11,229	10,530	10,188	9,226	12,732	7,912	8,109	9,213	8,311	7,812
December	7,107	6,756	6,937	7,971	14,588	6,243	6,282	5,587	6,161	6,521
Total	95,501	107,269	110,272	105,570	131,172	69,179	81,724	89,530	90,260	89,099

1. Between May 19 and July 10, 2005, a labour dispute at the SAAQ halted the renewal and obtention of driver's licences.

Overview of the Assessment Methodological Framework

Groups Studied

Group of licence holders		Period BEFORE January 17, 2010					Period SINCE January 17, 2010				
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Driving experience	Age										
Learner drivers	Ages 16 to 24	■	■	■	■	■	■	■	■	■	■
	Ages 25+	■	■	■	■	■	■	■	■	■	■
Driving alone, first year	Ages 16 to 24		■	■	■	■		■	■	■	■
	Ages 25+		■	■	■	■		■	■	■	■
Driving alone, second year	Ages 16 to 24			■	■	■			■	■	■
	Ages 25+			■	■	■			■	■	■
Driving alone, third year	Ages 16 to 24				■	■				■	■
	Ages 25+				■	■				■	■

Key: Learner's licence Probationary licence Driver's licence

Overview of the Assessment Methodological Framework

Control Groups

Group of licence holders		Period BEFORE January 17, 2010					Period SINCE January 17, 2010				
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Driving alone, 4 to 9 years of experience	Ages 25 to 29	■	■	■	■	■	■	■	■	■	■
	Ages 25+	■	■	■	■	■	■	■	■	■	■
	Ages 25 to 29	■	■	■	■	■	■	■	■	■	■
	Ages 25+	■	■	■	■	■	■	■	■	■	■
	Ages 25 to 29	■	■	■	■	■	■	■	■	■	■
	Ages 25+	■	■	■	■	■	■	■	■	■	■

Overall Effect of the RSEP and the New Graduated Licensing Measures on the Road Safety Record of New Drivers

Main New Graduated Licensing Measures Affecting Each Group of Licence Holders

Group of licence holders		New graduated licensing measures			
Driving experience	Age	RSEP mandatory for all (January 17, 2010)	24-month probationary licence for all (January 17, 2010)	Graduated maximum demerit point bracket Under age 25 (June 19, 2011)	Zero alcohol Under age 22 (April 15, 2012)
Learner drivers	Ages 16 to 24	✓			
	Ages 25+	✓			
Driving alone, First year	Ages 16 to 24	✓			
	Ages 25+	✓	✓		
Driving alone, Second year	Ages 16 to 24	✓			
	Ages 25+	✓	✓		
Driving alone, Third year	Ages 16 to 24	✓		✓	✓
	Ages 25+	✓	✓		

Key:



Individual effect of the RSEP

Effect of the RSEP and the new mandatory 24-month probationary licence rule for all new drivers

Effect of the RSEP, the graduated maximum demerit point bracket for drivers under age 25 and the zero-alcohol rule for drivers under age 22

**Effect of the RSEP
On the Rate of New Drivers Involved in Accidents Causing Bodily Injury Per Year, Per 1,000 Licence Holders**

New driver group		Rate		Effect ¹
Driving experience	Age	Period BEFORE January 17, 2010	Period SINCE January 17, 2010	% (number ²)
Learner drivers	Ages 16 to 24	2.1	1.4	-25 (33)
	Ages 25+ ³	2.6	1.9	-20 (6)
Driving alone, first year (probationary licence)	Ages 16 to 24	37.7	28.4	-17 (224)
Driving alone, second year (probationary licence)	Ages 16 to 24	27.7	20.6	-19 (106)

¹ Overall effect taking into account the variation of the control group on the accident/exposure ratio.

² Estimated number of drivers that were not involved in accidents causing bodily injury, per year, due to the RSEP.

³ The results for this group are presented for information purposes only, as the size of the group for this analysis is small.

Effect of the RSEP and Mandatory 24-Month Probationary Licence for all Drivers on the Rate of New Drivers Involved in Accidents Causing Bodily Injury Per Year Per 1,000 Licence Holders

Group of new drivers		Rate		Effect ¹
Driving experience	Age ³	Period BEFORE January 17, 2010	Period SINCE January 17, 2010	% (number ²)
Driving alone, first year (probationary licence and/or driver's licence)	Ages 25+	19.3	15.3	-12 (9)
Driving alone, second year (probationary licence and/or driver's licence)	Ages 25+	17.5	13.2	-18 (7)
Driving alone, third year (driver's licence)	Ages 25+	13.8	9.3	-28 (3)

¹ Overall effect taking into account the variation of the control group on the accident/exposure ratio.

² Estimated number of drivers that were not involved in accidents causing bodily injury, per year, due to the effect of the RSEP and mandatory 24-month probationary licence.

³ The number of new drivers aged 25 or older is much smaller than the number of new drivers aged 16 to 24. As a result, the impacts are measured using small groups, particularly for the third year driving alone.

Effect of the RSEP, the Graduated Maximum Demerit Point Bracket for Drivers Under Age 25 and the Zero-Alcohol Rule for Drivers Under Age 22 on the Rate of New Drivers Involved in Accidents Causing Bodily Injury Per Year, Per 1,000 Licence Holders

Group of new drivers		Ratio		Effect ¹
Driving experience	Age	Period BEFORE January 17, 2010	Period SINCE January 17, 2010	% (number ²)
Driving alone, Third year (driver's licence)	Ages 16 to 24	21.5	18.4	-10 (17)

¹ Overall effect taking into account the variation of the control group on the accident/exposure ratio.

² Estimated number of drivers that were not involved in accidents causing bodily injury, per year, due to the RSEP, the graduated maximum demerit point bracket for drivers under age 25 and the zero-alcohol rule for drivers under age 22.

Rate of Drivers in the Control Group Involved in Accidents With Bodily Injury Per Year Per 1,000 Licence Holders

Control Group		Percentage	
Comparison of new driver groups	Age	Period BEFORE January 17, 2010	Period SINCE January 17, 2010
Learner drivers	Ages 25 to 29	12.12	11.02
	Ages 25+	12.06	10.91
Driving alone, First year	Ages 25 to 29	11.96	10.87
	Ages 25+	11.93	10.75
Driving alone, Second year	Ages 25 to 29	11.63	10.68
	Ages 25+	11.60	10.65
Driving alone, Third year	Ages 25 to 29	11.19	10.60
	Ages 25+	11.27	10.60

Key:

	Individual effect of the RSEP, for the control group of new drivers
	Effect of the RSEP and the new mandatory 24-month probationary licence for all new drivers, for the control group of new drivers
	Effect of the RSEP, the graduated maximum demerit point bracket for drivers under age 25 and the zero-alcohol rule for drivers under age 22, for the control group of new drivers

Conclusion

- The implementation of the RSEP and the new graduated licensing measures has had a *significant impact* on many aspects of the mobility and safety of new passenger vehicle drivers involved in accidents causing bodily injury.
 - Individual effect of the RSEP
 - **25% reduction of** the rate of new drivers aged 16 to 24 that are involved in accidents, with a learner's licence or a probationary licence;
 - **Approximate 20% improvement** of the road safety record of learner drivers aged 25 or older that are involved in accidents;¹
 - Effect of the RSEP and the 24-month probationary licence¹
 - **Reduction of 12% and 18% in the rate of new drivers aged 25 or older**, in their first and second years of driving alone, respectively, who are involved in accidents;
 - Effect of the RSEP, the graduated maximum demerit point brackets for drivers under age 25 and the zero-alcohol rule for drivers under 22
 - **Reduction of approximately 10%** in the rate of new drivers aged 16 to 24, in their first year holding a licence, who are involved in accidents

¹(Results limited by the small number of drivers in this age group)

Thank you for your attention!