



DRUG-IMPAIRED DRIVING
LEARNING CENTRE

Prevalence of marijuana use among Canadian drivers: Self-reported behaviour

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Background



- **In comparison to alcohol, much less is known about marijuana and driving in terms of:**
 - prevalence of the problem;
 - consequences on driving performance; and,
 - strategies to manage marijuana-impaired drivers.
- **Research is being conducted at an unprecedented pace, and consolidation of knowledge on this road safety issue is key.**



Drug-Impaired Driving Learning Centre (DIDLC)



- **Web-based resource summarizes latest research about drug-impaired driving from several disciplines.**
- **Compiles and synthesizes latest research in an accessible, user-friendly format.**
- **Four modules structured in Q & A format to help users access topics of interest.**
 - Drug-impaired driving problem in terms of magnitude, characteristics and perceptions;
 - Impairing effects of drugs on driving;
 - Laws and penalties; and,
 - Tools and technologies to identify drug-impaired drivers.



Marijuana & driving



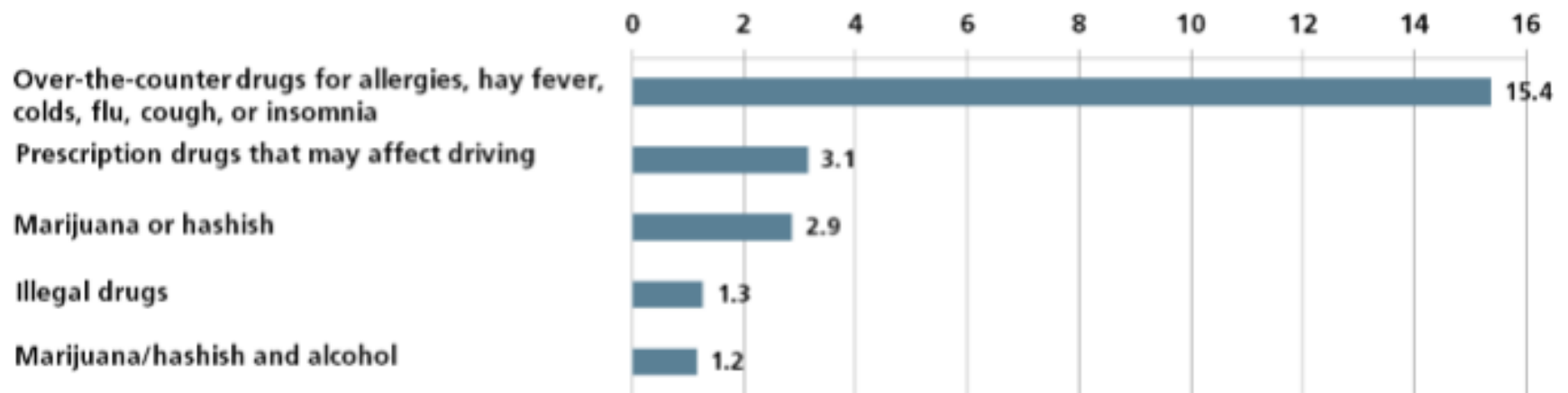
- **Self-reported behaviours and attitudes collected as part of the TIRF Road Safety Monitor (RSM) series since 2002**
 - Results are based on analyses of RSM 2017 data
 - Trends comparing with previous years when appropriate.
- **RSM online survey (2017: N=2,018)**
 - Respondents: 16+, valid drivers license, driven in past 30 days
 - 50 items
 - 6-point rating scale



Marijuana & driving: prevalence



Percentage of drivers who drove within two hours of taking drugs in the past 12 months



Almost **three percent (2.9%)** of Canadian drivers said that they had driven a motor vehicle within two hours of using marijuana or hashish at least one time during the previous 12 months in 2017.



*Source: Robertson et al. 2018

Marijuana & driving: prevalence



- **Age: self-reported marijuana use and driving**
 - 22.2% were between the ages of 16 to 24 years;
 - 49.7% were between 25 to 44 years old; and,
 - 28.1% were at least 45 years old.
- **Young drivers aged 16 to 24 years were more likely than those aged 65 and older to drive within two hours of using marijuana and hashish (OR=25.9, $p=0.006$; 10.6% vs. 0.3%).**



Marijuana & driving: prevalence



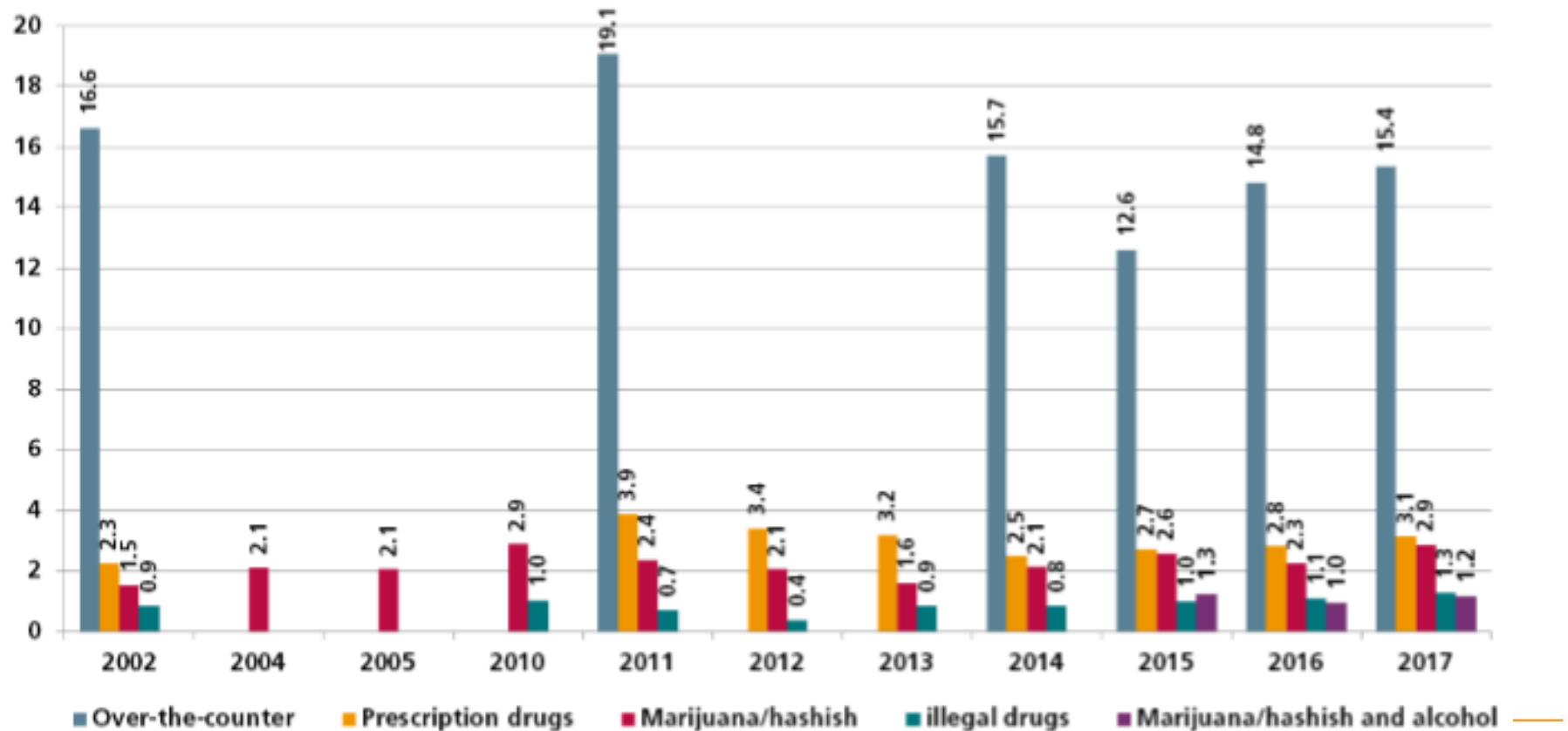
- **Sex: self-reported marijuana use and driving**
 - Many more male drivers (5.1%)
 - versus 0.8% female drivers reported this behaviour (OR=6.8, $p < 0.001$).
- **Drivers who had been injured in a motor vehicle crash (OR=2.8, $p = 0.02$; 4.5% vs. 2.5%)**
- **Drivers with tickets (OR=3.1, $p = 0.03$; 10.2% vs. 2.3%) were more likely to admit engaging in drugged driving after using marijuana or hashish.**



Marijuana & driving: 2002-2017



Trends in the percentage of drugged drivers in Canada, 2002-2017



Conclusions



- The proportion of self-reported use of marijuana and driving have been increasing since 2013.
- Self-report & fatality data are essential to understand the impact of legalization on road safety.
- Equally important to inform enforcement strategies and public education efforts.



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