Enhancing Drug-Impaired Driving Data Across Canada: Commercial Vehicle Operator Data

The Issue

Every year, thousands of people living in Canada are seriously injured or killed in collisions involving drugs other than alcohol (Brown et al., 2015, 2021; Statistics Canada, 2021). Due to the nature of the work, driving a commercial vehicle (e.g., large transport truck, bus) is one of several occupations associated with an increased risk of drug use and possible impairment on the job (Frone, 2006; Girotto et al., 2014). During roadside surveys, randomly select drivers are tested for the presence of alcohol and other drugs. Results are anonymous and confidential. These surveys are the best and sometimes only source of information to establish how many people drive after using drugs in Canada. No roadside surveys have ever been conducted on commercial vehicle drivers in Canada. There are almost no data in this area other than police-reported incidents.

The Significance of the Data

Little is known about the extent of DID among commercial drivers and the impact it has on other road users in Canada. Given the heightened risk for collision, serious injury and death that large commercial vehicles pose to other road users (Mayhew et al., 2017), DID among this population of drivers should be explored. Without more information, there's no way to know how many drivers operate commercial vehicles after using drugs or how to reduce or prevent it. Policy makers, decision makers, road safety practitioners and even commercial drivers themselves can benefit from these data.

Recommended Indicators

Four data indicators are recommended to collect standardized roadside survey data from commercial vehicle drivers in Canada. These were developed by and in consultation with DID experts across Canada.

The table describes the four indicators. Since no roadside surveys have been conducted on commercial drivers in Canada yet, all proposed indicators are new. Some may need a high degree of effort and investment to implement nationally.

Data source	Indicator
New[a]	THC use (oral fluid) among drivers • Number and percentage of drivers who tested above 25 ng/ml for THC Date, day of the week and time when driver was stopped • Number and percentage of drivers who tested positive for different substance categories by time periods (e.g., midnight to 3 a.m.), day of the week and date Substance category[b] and polysubstance use among drivers • Number and percentage of drivers who tested positive for different substance categories • Number and percentage of drivers who tested positive for polysubstance, THC and alcohol, or THC and other drugs Driver demographics[c] • Number and percentage of drivers who tested positive for different substance categories[b] across vehicle and trip characteristics[d] • Number and percentage of drivers who tested positive by different substance categories across sex (or gender where possible) • Number and percentage of drivers who tested positive for different substance categories across standardized age groups[e]

[a]New indicators include nonexistent or not widely used indicators (e.g., some agencies may track some of these data).

[b]Categories are defined as the seven used by Drug Recognition Experts (Royal Canadian Mounted Police, 2018): central nervous system depressants, inhalants, dissociative anaesthetics, cannabis, CNS stimulants, hallucinogens and narcotic analgesics.

[c]Standardized data collection methods and criteria used across Canada.

[d]Characteristics might include type of vehicle, type of goods being carried, among others.

[e]Recommend standardization be based on the Canadian Council of Motor Transportation Administrators age groups (i.e., 16–19, 20–24, 25–34, 35–44, 45–54, 55–64, and 65 years and older).

These indicators are part of a broader set of 34 national DID indicators for various agencies recommended by an expert Drug-Impaired Driving Indicators Advisory Committee, chaired by the Canadian Centre on Substance Use and Addiction. For a complete list of the recommended indicators, see the full report, *Measuring the Impact of Drug-Impaired Driving: Recommendations for National Indicators*. Also included in the report are suggestions for agencies to address potential challenges in implementing the recommendations (e.g., standardizing data, data sharing, financial costs) and more detailed information about the Advisory Committee.

Top Considerations for Implementation

• Roadside surveys are costly to administer but important to conduct. The Advisory Committee recommends establishing a formal funding mechanism to support the regular collection and reporting of commercial roadside survey data from across Canada.

• There are logistical challenges to conducting surveys with commercial drivers, including how to handle an impaired driver. A procedure is needed to safely transport impaired drivers and their vehicles while also protecting the anonymity and confidentiality of the driver. The procedure can be modelled on that used by roadside surveys for passenger vehicles. One procedure is in development but not yet public.

• Data collected from drivers about their substance use (e.g., consumption methods, most recent use) are limited by what the driver remembers or reports, and whether they know the substance or substances they have consumed may cause impairment (e.g., prescription or over-the-counter

medications). This is a natural limitation to studies with people. However, with more education about impairing drugs, driver knowledge could improve these types of self-reported data.

For a full discussion of these and other considerations for implementation, see the full report.

References

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