

# **THE MAGNITUDE OF THE IMPAIRMENT-RELATED CRASH PROBLEM IN CANADA: AN OVERVIEW**

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## **The Magnitude of the Impairment-Related Crash Problem in Canada: An Overview**

MADD Canada has adopted a comprehensive approach in assessing the impairment-related (alcohol/drugs) crash problem in Canada. MADD Canada has attempted to obtain a complete picture which encompasses: alcohol and drugs; all types of vehicles and vessels; the full range of harms and losses (fatalities, injuries, property damage, and their social costs); and crashes that occur on public and private roads and property, and on the water. This broad approach is mandated by MADD Canada's mission, which is to assist all victims of impaired crashes and to reduce the total number of fatalities, injuries, and property damage crashes.

Other organizations and government agencies also publish reports on impairment-related crashes in Canada. Their data often differ from MADD Canada's, because they have defined their terms of reference more narrowly. For example, their fatality statistics may be limited to alcohol-related motor vehicle crashes occurring on public roads. Similarly, their injury data may be limited to injuries that require a hospital admission, and crashes that the police attend and for which they write a formal report. Simply because their data differ from those of MADD Canada does not mean that their data are inaccurate. Rather, these differences reflect their more limited scope of inquiry.

### **Fatalities**

In 2010, it was estimated that 2,541 individuals were killed in motor vehicle crashes in Canada. MADD Canada estimates that at a minimum 1,082 of these fatalities were impairment-related. In MADD Canada's opinion, the 1,082 figure is a conservative estimate, due to the underreporting that results from the inability to conduct alcohol tests on surviving impaired drivers and from the need to rely on police reports. Moreover, the figure underestimates the percentage of crash deaths that involve drugs. Thus, the recent sharp increases in driving after drug use have not been factored into the 1,082 figure.

As well, the 1,082 figure does not include individuals killed in impaired crashes on the waterways. It was estimated that there was an average of 135 boating deaths per year from 2006 to 2008 and it appears that more than 50% of these boating deaths involved alcohol and/or drugs. Nor does the 1,082 figure include fatalities arising from aircraft, trains and industrial vehicles such as forklifts.

Given the limits on the 1,082 figure, MADD Canada estimates there are somewhere between 1,250 and 1,500 impairment-related crash deaths in Canada each year (3.4–4.1 deaths per day).

## **Injuries**

In 2010, it was estimated that about 299,838 individuals were injured in motor vehicle crashes. MADD Canada estimates that approximately 63,821 of these individuals were injured in impairment-related crashes (roughly 175 per day). Note that this figure is limited to motor vehicle crashes only.

## **Property Damage**

In 2010, it was estimated that approximately 1,651,650 motor vehicles were involved in property damage-only crashes in Canada. MADD Canada estimates that approximately 210,932 of these vehicles were damaged in impairment-related crashes (roughly 578 per day).

## **Estimated Cost of Impaired Driving Crashes**

Using a social cost model, impairment-related driving deaths, injuries and property damage-only crashes in Canada can be estimated to have cost \$20.62 billion in 2010. This model is recent, is based on extensive analysis, and was prepared for the federal Ministry of Transportation. This figure is also limited to motor vehicle crashes.

## **Sources for the Data**

The estimates for impaired driving used in this document are explained in a report entitled “Estimating the Number and Cost of Impairment-Related Traffic Crashes in Canada: 1999 to 2010” by Professors Stephen G.A. Pitel and Robert Solomon, both of Western University. That report is based in part on G. Mercer & M. Marshall, “Estimating the Presence of Alcohol and Drug Impairment in Traffic Crashes and their Cost to Canadians: A Discussion Paper” (Vancouver: ARES, December 2002) and G. Mercer, “Estimating the Presence of Alcohol and Drug Impairment in Traffic Crashes and their Costs to Canadians: 1999 to 2006” (Vancouver: ARES, 2009).