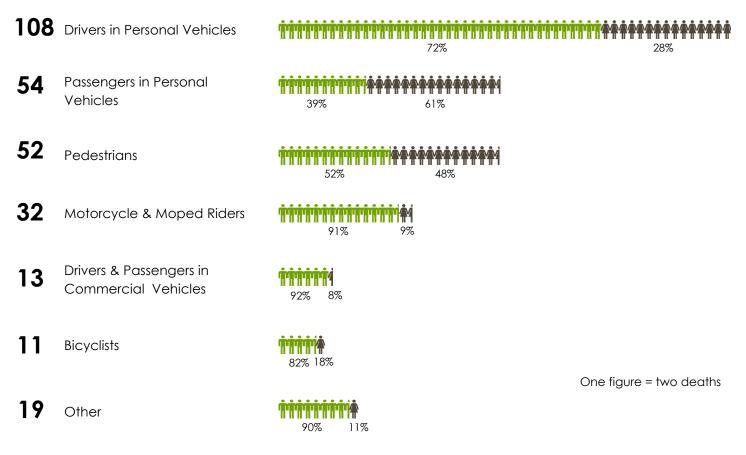


Factors Contributing to Motor Vehicle Incident Fatalities in British Columbia (2013)



September 2015

Motor Vehicle Incident Deaths in 2013



In 2013, a total of 289 accidental motor vehicle incident (MVI) deaths occurred in British Columbia and were investigated by the BC Coroners Service. See Glossary for the definition of 'MVI death'.

Coroners investigate the circumstances of a motor vehicle fatality to determine where, when, how, and why the incident occurred. Coroners may visit the scene of the incident, seize relevant documents and material, review pre-incident events, work with traffic reconstruction specialists, and order autopsy/toxicology testing as required. Where possible, coroners identify factors contributing to the incident. Recommendations can be made to prevent similar incidents or contributing factors can be analyzed in the aggregate to inform prevention efforts.

This summary of contributing factors is based on 246 of the 289 MVI deaths occurring in 2013. Twenty-seven cases were excluded because they were still under investigation at the time of writing. Sixteen cases were excluded because the motor vehicle incident had occurred years prior to the death or because information on the circumstances of the incident was otherwise unavailable. Data is not directly comparable to other agencies because of differences in definitions and inclusion criteria.

Contributing Factors in 2013 MVI Deaths

Contributing factors were grouped into four categories for reporting purposes: Vehicle, Environmental, Driver, and Other Road Users. Each category includes 3-8 factors, as noted below. **There is often more than one contributing factor in a motor vehicle fatality.** For example, a speeding driver may lose control in winter road conditions. Speed (a driver factor) and weather/road conditions (an environmental factor) may both be identified as contributing factors.

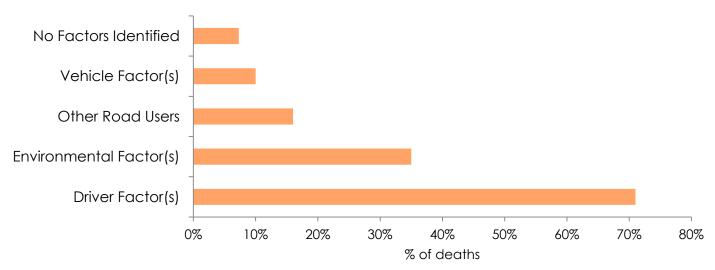
Driver Factors are driver characteristics and behaviour. In this context, 'driver' includes motorcyclists and moped riders. Examples of driver factors include speeding, impairment, inattention, and inexperience. Driver factors contributed or were suspected to have contributed to 71% of MVI deaths (175/246).

Environmental Factors are aspects of the driver's environment. These include weather, light conditions, road conditions, and unexpected obstacles in the roadway. Environmental factors contributed or were suspected to have contributed to 35% of MVI deaths (87/246).

Other Road Users refers to the characteristics and behaviour of pedestrians, cyclists, and other non-drivers involved in MVI deaths. Examples include impairment, inexperience, and violation of traffic laws. Other road users contributed or were suspected to have contributed to 16% of MVI deaths (40/246).

Vehicle Factors are vehicle features or defects, such as faulty brakes, unsuitable tires, and modifications that reduce vehicle stability. Vehicle factors contributed or were suspected to have contributed to 10% of MVI deaths (24/246).

For 18 deaths, no contributing factors were identified.

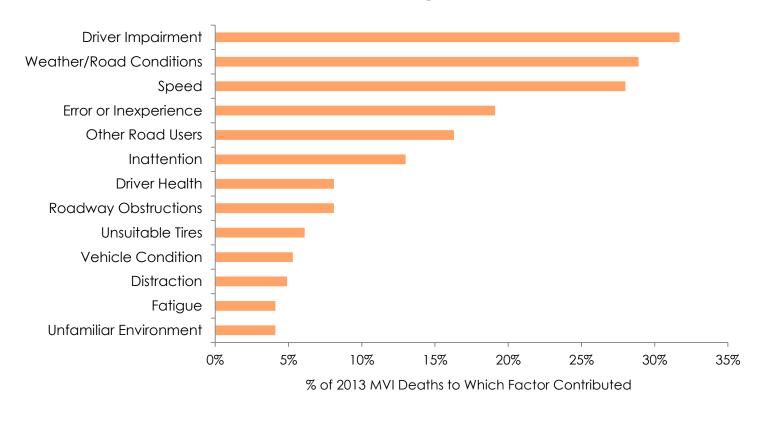


2013 MVI Deaths by Contributing Factors

Top Three Contributing Factors

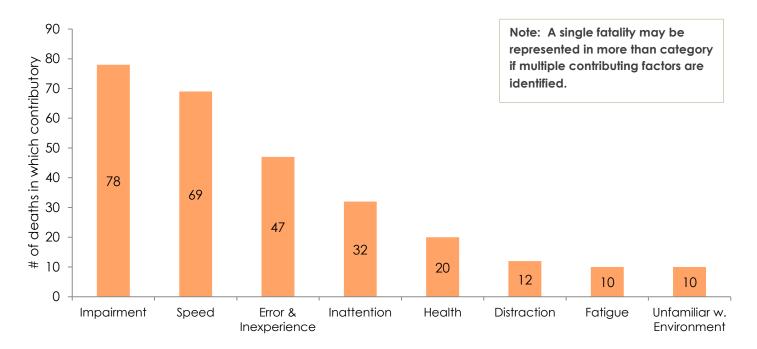


All Contributing Factors



See GLOSSARY for definitions of contributing factors.

A More Detailed Look at Driver Factors



Driver Factors Contributing to 2013 MVI Deaths

What's the difference between the contributing factors DISTRACTION, INATTENTION, and FATIGUE?

Definitions vary, but this report defines the terms as follows:

Inattention is 'the voluntary or involuntary diversion of attention from activities critical for safe driving' (adapted from Regan et al., 2011).

Fatigue is inattention caused by insufficient rest, sleepiness, or falling asleep.

Distraction is inattention caused by an identifiable distraction. Examples include conversing with a passenger, eating, using an electronic device, looking at scenery, and adjusting vehicle controls.

Limitations: In some cases (unwitnessed MVIs), it may not be possible to determine whether inattention was a factor. For this reason, these statistics may not capture all cases in which inattention was contributory. When inattention is identified, it is not always possible to distinguish between the effects of fatigue, distraction, and other causes of inattentive driving (e.g.: daydreaming). For deaths listed under the general term 'inattention' in the charts above, driving behaviour was suggestive of inattention but neither distraction nor fatigue could be confirmed.



Distraction: The driver was inattentive as the result of an identifiable distraction. Examples include eating, adjusting vehicle controls; using cell phones; conversing with passengers; and attending to aspects of the external environment, such as scenery or advertising.

Error & Inexperience: (a) The driver's abilities were compromised by inexperience; or (b) the driver made an error that was not attributed to impairment or inattention (e.g. failing to yield, making an illegal U-turn, and running a red light); or (c) the driver was driving with no license or with a suspended license.

Fatigue: The driver was inattentive as a result of insufficient rest, sleepiness, or falling asleep.

(Driver) Health: The driver's abilities were compromised by advanced age or a medical condition.

(Driver) Impairment: The driver was impaired by the effects of alcohol, illicit drugs, prescription drugs, or over-the-counter medication.

Inattention: The driver was inattentive. Inattention is defined as 'the voluntary or involuntary diversion of attention from activities critical for safe driving' (adapted from Regan et al., 2011). Inattention may be the result of fatigue, distraction, or daydreaming, or preoccupation with matters unrelated to driving. When inattention was known to have arisen from fatigue or distraction, deaths were coded under the more specific term.

Motor Vehicle Incident Death: A death involving the operation of a motor vehicle that occurs on a public "highway", as defined in the Motor Vehicle Act. This definition encompasses any roadway intended for or used by the public for the passage of vehicles, and any private place to which the public has access or is invited (e.g., for parking or vehicle servicing). Private driveways and forest service roads are excluded, except where the forest service road is open to public use. Incidents involving off-road vehicles, industrial vehicles, and farm vehicles are included when occurring on public highways, but excluded when occurring off-road or on a worksite.

Other Road Users: The behaviour or characteristics of a non-driving road user contributed to the death. Non-driving road users include pedestrians, pedal cyclists, and individuals who were riding outside the cab of the vehicle prior to death.

Roadway Obstructions: The driver collided with an object, vehicle, or animal that was camouflaged, poorly marked, emerged unexpectedly, or was otherwise difficult to avoid.

Speed: The driver was travelling too fast or too fast for conditions.

Tires: The vehicle's tires were worn, mismatched, or unsuitable for seasonal driving conditions.

Unfamiliar (w.) Environment: The driver was on an unfamiliar road and/or in an unfamiliar vehicle.

Vehicle Conditions: Mechanical defects, vehicle design, or vehicle modifications contributed to the MVI.

Weather/Road Conditions: (a) Visibility was compromised by light or weather conditions; or (b) Weather or road surface defects had made the road wet, icy, potholed, or otherwise difficult to

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