**Fact Sheet: Blood Alcohol Concentration (BAC)**

The amount of alcohol in a person’s body is measured by the amount of the alcohol in blood. This is called the blood alcohol concentration, or BAC.

For the purposes of law enforcement, BAC is used to define intoxication and provides a measure of impairment. In Ontario and the rest of Canada, the maximum legal BAC for fully licensed drivers is 80 milligrams of alcohol in 100 millilitres of blood (0.08). Driving with BAC in excess of 0.08 is a criminal offence.

BAC levels are affected by many factors, including:

* **How fast you drink.** Alcohol consumed quickly will result in a higher BAC than when consumed over a long period of time.
* **Gender.** Women generally have less water and more body fat per pound of body weight than men. Alcohol does not go into fat cells as easily as other cells, so more alcohol remains in the blood of women.
* **Body weight.** The more you weigh, the more water is present in your body. This water dilutes the alcohol and lowers the BAC.
* **Amount of food in your stomach.** Absorption is slowed if you’ve had something to eat.

With a BAC of 0.05, an individual’s vision may already be affected in terms of sensitivity to brightness, the ability to determine colours, and depth and motion perception. The brain’s ability to perform simple motor functions is diminished. This means that a driver’s reaction time will be slower and responses will be less accurate. The result is degraded driving performance and a significant increase in collision risk.

The increased collision risk of drivers with a BAC from 0.05 to 0.08 (also known as the "warn range") is well documented:

* Drivers with a BAC above 0.05 but below the legal limit are 7.2 times more likely to be in a fatal collision than drivers with a zero BAC.
* In 2005, 16.7% of drinking drivers killed in Ontario had a BAC less than 0.08.

**How much can I drink before I reach the 0.05 BAC limit?**

The number of drinks consumed is a poor measure of BAC because of the many factors affecting your body’s ability to digest alcohol, such as weight, body fat, and how long ago and how much you ate. Factors like tiredness and your mood can also make a difference in how alcohol affects your driving ability.

It is very difficult to assess your own BAC or impairment. Small amounts of alcohol affect one’s brain and the ability to drive.

If you plan on drinking, plan to not drive.