

The ABCs of BAC

A Guide to Understanding Blood Alcohol Concentration and Alcohol Impairment

Q: What is "BAC"?

A: The amount of alcohol in a person's body is measured by the weight of the alcohol in a certain volume of blood (measured in grams per deciliter). This is called the blood alcohol concentration or "BAC."

Alcohol is absorbed directly through the walls of the stomach and the small intestine, goes into the bloodstream, and travels throughout the body and to the brain.

Alcohol is quickly absorbed and can be measured within 30 to 70 minutes after a person has had a drink.

Q: Does the type of alcohol I drink affect my BAC?

A: No. A drink is a drink, is a drink.

A typical drink equals about half an ounce of alcohol (.54 ounces, to be exact). This is the approximate amount of alcohol found in:

- ◆ one shot of distilled spirits, or
- ◆ one 5-ounce glass of wine, or
- ◆ one 12-ounce beer.

Q: What affects my BAC?

A: How fast a person's BAC rises varies based on a number of factors:

- ◆ **The number of drinks.** The more you drink, the higher your BAC.
- ◆ **How fast you drink.** When alcohol is consumed quickly, you will reach a higher BAC than when it is consumed over a longer period of time.
- ◆ **Your 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.
- ◆ **Your weight.** The more you weigh, the more water is present in your body. This water dilutes the alcohol and lowers the BAC.
- ◆ **Food in your stomach.** Absorption will be slowed if you've had something to eat.

Q: What about other medications or drugs?

A: Medications or drugs will not change your BAC. However, if you drink alcohol while taking certain medications or drugs, you may feel – and be – more impaired, which can affect your ability to perform driving-related tasks.



Q: When am I impaired?

A: Because of the number of factors that affect BAC, it is very difficult to assess your own BAC or impairment. Even small amounts of alcohol affect one's brain and the ability to drive. People often swear they are "fine" after several drinks – but in fact, the failure to recognize alcohol impairment is often a symptom of impairment.

While the lower stages of alcohol impairment are undetectable to others, the drinker knows vaguely when the "buzz" begins. A person will likely be too impaired to drive before looking – or maybe even feeling – "drunk."

Q: How will I know I'm impaired, and why should I care?

A: Alcohol steadily decreases a person's ability to drive a motor vehicle safely. The more you drink, the greater the effect. As with BAC, the signs of impairment differ with the individual.

Drivers with a BAC of .08 are approximately *4 times more likely* to crash than drivers with a BAC of zero. At a BAC of .15, drivers are at least *12 times more likely* to crash than drivers with a BAC of zero. The risk of crashing is even greater for young males. Further, many studies have shown that even small amounts of alcohol can impair a person's ability to drive.

Every State has passed a law making it illegal to drive with a BAC of .08 or higher. A driver also can be arrested with a BAC below .08 when a law enforcement officer has probable cause, based on the driver's behavior.

The following chart contains some of the more common symptoms people exhibit at various BAC levels, and the probable effects on driving ability.

	Fatal	Injury	Property Damage	Total	Fatalities Nationwide
2017	109	1,458.00	2,176.00	3,743.00	X
2016	225	3,921.00	5,515.00	9,661.00	X
2015	259	3,699.00	5,573.00	9,531.00	10,265.00
2014	245	3,579.00	5,624.00	9,448.00	9,967.00
2013	194	3,434.00	5,368.00	8,996.00	10,076.00
2012	215	3,629.00	5,302.00	9,146.00	10,322.00
2011	200	3,493.00	5,343.00	9,036.00	9,878.00
2010	209	3,683.00	5,277.00	9,169.00	10,228.00
2009	291	X	X	X	10,839.00
2008	331	X	X	X	11,773.00
2007	377	X	X	X	12,998.00
2006	390	X	X	X	13,470.00
2005	431	X	X	X	16,885.00
2004	485	X	X	X	16,694.00
2003	494	X	X	X	17,524.00
2002	490	X	X	X	17,419.00
2001	520	X	X	X	17,448.00
2000	506	X	X	X	16,653.00
1999	547	X	X	X	15,786.00
1998	536	X	X	X	15,935.00
1997	558	X	X	X	16,189.00
1996	613	X	X	X	17,126.00

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