Policy Brief: Blood Alcohol Concentration (BAC)

Summary:
In Michigan, a person is deemed to be operating while intoxicated by having a blood alcohol concentration (BAC) of 0.08 grams or more per 100 milliliters of blood. New proposed rules would reduce the legal limit from 0.08% BAC to 0.05% BAC. If passed, Michigan would join Utah as the second State to adopt a new, lower BAC limit for driving. In addition to Utah, many countries around the world have BAC limits of 0.05 or lower, including but not limited to: Australia (0.05%), France (0.05%), Spain (0.05%), Russia (0.04%), and Poland (0.02%).

Public Health Impact:
Research shows a reduction in BAC from 0.08% to 0.05% reduced traffic fatalities by 8-12 percent among those aged 18-49. According to the National Academies of Sciences Engineering and Medicine, in 2016, alcohol-impaired driving was responsible for 10,497 lives lost, or approximately 28 percent of all highway traffic fatalities. This represents a 1.7 percent increase from 2015.

BAC Effects on Driving:
According to the National Transportation Board (Table 1), research findings show the effects of alcohol on driving-related skills can occur at levels as low as 0.01% BAC. In addition to impairing driving-related performance, alcohol use is associated with a decrease in seat belt use.

Alcohol-Impaired Driving in Michigan:
In 2017, there were 10,265 crashes that involved alcohol in Michigan, a 5 percent increase from 2016. On average, that’s 28 alcohol-related crashes per day. Of the 937 fatal crashes that occurred in Michigan, 320 (34.2 percent) were alcohol related. Within those 320-alcohol related fatal crashes, there were a total of 359 lives lost, a 31 percent increase from 2016-2017.

---


This publication was supported by Cooperative Agreement Number NU58DP001006 from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention.