

Should Colorado adopt a 5 ng permissable limit for THC? Yes

Creating a standard for drivers' THC levels is essential

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By Steve King

This legislative session, I will again introduce a bill to create a marijuana blood-level limit for drivers in Colorado.

The bill would make Colorado the third state in the country to adopt a driver's blood standard for THC, the psychoactive ingredient in marijuana. Here are my reasons:

The science

- All current, peer-reviewed, validated studies say that people are generally under the influence at 5 nanograms(ng) of delta-9 THC per milliliter of whole blood (mL).
- A person with 5 ng/mL delta-9 is 6.6 times more likely to cause a crash than a person with no detectable delta-9.
- At 5 ng/mL, most users will exhibit objective signs of impairment, including impairment of psychomotor skills. Highly automated behaviors, those not requiring conscious monitoring (i.e., driving), are most affected as well as critical tracking, ability to complete divided attention tasks, and complex tasks. Signs of impairment begin between 1-2.5 ng/mL. Global impairment is observed between 2.5-5 ng/mL.
- Chronic users may partially compensate for some impairing effects of THC, but only for short periods of time and for simple tasks, not for unexpected or high-demand circumstances. Heavy users may develop partial tolerance for some of the impairing effects of THC but insufficient for the complex tasks required to drive.
- When smoked, peak delta-9 THC levels are reached while actively smoking and range from 25-100s of ng/mL. This level drops to less than 5 ng/mL within three hours after smoking. Heavy users may have residual levels of less than 2-3 ng/mL within twelve hours after smoking. Very low levels of THC (less than 1 ng/mL) may be detected in heavy users for weeks following smoking.

- When used orally, peak delta-9 THC levels occur between one and three hours after ingestion and range from 1-6 ng/mL. Even in chronic users, THC levels normally drop below 5 ng/mL within three hours after use.

The problem in Colorado

According to the Colorado Department of Public Health and Environment, between 2009 and 2011, the number of drivers testing positive for delta 9 THC in their system nearly tripled. The numbers for 2012 are similar to those for 2011. Some of the vehicular homicides and assaults involving marijuana in Colorado:

- Steven Ryan was convicted in Weld County of DUI vehicular homicide for the 2010 deaths of 23-year-old Tanya Guevara and her month-old baby, Adrian. Ryan had 4ng/mL of delta-9 and no other substances in his system 4 hours after the homicide.
- Makia Milton was convicted in Adams County of reckless vehicular homicide, reckless vehicular assault and leaving the scene, but acquitted of DUI, vehicular homicide DUI, and vehicular assault DUI. In December 2011, Milton was driving at a high rate of speed, ran one red light, then drove through another at an estimated speed of 79 mph in a 40 mph zone. Makia T-boned a truck with three people inside. The driver, a 54-year-old woman, was ejected from the truck and died from her injuries. Milton had 11 ng/mL of delta-9 two hours after the accident. (During trial, the defense focused on the fact that there is no per se level in Colorado.)
- Atticus Carr pleaded guilty to a 2009 DUI vehicular assault in La Plata County for rear-ending a car that, as a result, was pushed into oncoming traffic, hitting three other cars. Carr had 20 ng/mL of delta-9 and no other substances in his blood.

State Sen. Steve King is a Republican from Grand Junction.

Should Colorado adopt a 5 ng permissible limit for THC? No

Allowing a 5 ng limit in THC levels is a license to drive high

Posted: 01/13/2013 12:01:00 AM MST

By Ed Wood

Colorado Sen. Steve King proposes a 5 ng/ml limit for THC in Colorado drivers, believing that will reduce drugged driving. His goal is laudable; his solution is not. It is badly flawed.

In Colorado, more than 70 percent of the blood samples tested from drivers arrested on suspicion of driving under the influence of marijuana are below 5 ng of THC. Today, those drivers are charged with DUI, and many are convicted. Few of them would be charged or convicted under a 5 ng permissible limit.

That limit, therefore, would give motorists a license to drive high. Any of their victims from accidents would be robbed of justice by the law.

Unlike alcohol testing, drug tests do not define the THC level of a driver at the time of arrest. Colorado law enforcement officers can test a driver's breath for alcohol at the roadside, but drug testing is only done with blood drawn by a medical professional. This causes a delay of 1-3 hours, sometimes more. THC metabolizes rapidly and exponentially, with levels dropping nearly 90 percent in the first hour after smoking, and about 45 percent or less per hour thereafter. An accurate blood test cannot project backward to determine the THC level at the time of arrest.

Most experts assert there is no level of THC that is equivalent to the 0.08 BAC limit for alcohol, despite claims otherwise. The work of Dr. Jan Ramaekers is widely cited. He informed our legislators two years ago that, within his select pool of research subjects, 5 ng/ml THC was the equivalent of 0.08 BAC. But Ramaekers' test subjects consisted of regular, but not daily, marijuana users. He excluded novice or infrequent users who may be more easily impaired, and he excluded daily users, such as medical marijuana patients, who may have developed a tolerance to some of the impairing effects of marijuana.

That's why Ramaekers cautioned that any legislative level must consider the pool of drivers to which the level is to be applied. That part of his

advice has been ignored. Also ignored were other key comments, including that THC impairment begins between 1 and 2 ng/ml, and that levels should be set principally to achieve road safety.

But most important, Ramaekers' research was able to test impairment and THC levels simultaneously, something that is impossible in the world of law enforcement. A "5 ng equivalent" is completely irrelevant for the purposes of creating a rational THC drugged-driving law.

Fortunately, there is a better way. Most states with drug per se laws prohibit drivers from any level of illicit drugs (including marijuana) that are taken illegally. If the drugs are taken legally, then the state must prove impairment on a case-by-case basis. Zero-tolerance laws do not define impairment; they simply state that driving after using illegal drugs is prohibited.

A zero-tolerance law provides no public protection from the legal use of drugs by drivers. That's why, in addition to a zero-tolerance law for illicit drugs, Colorado needs a defined-level law specifically for marijuana. Rather than establishing a 5 ng/ml THC permissible limit, a rational approach consists of:

- A zero-tolerance limit for THC in minors; and
- A 1 or 2 ng/ml THC level for adults.

Colorado's constitution requires that we make some accommodations for the use of marijuana, but it doesn't require we do so at the expense of highway safety or justice for victims. But that's exactly what a 5 ng law would do.

Ed Wood of Morrison directs deceptionpass3.com, a network of DUID victims who lobby for more effective drugged-driving laws. He is a retired medical device executive.