Will traffic deaths rise as states legalize pot?

By Joan Lowy, AP

WASHINGTON — As states liberalize their marijuana laws, public officials and safety advocates worry that more drivers high on pot will lead to a big increase in traffic deaths. Researchers who have studied the issue, though, are divided on the question.

Studies of marijuana's effects show that the drug can slow decision-making, decrease peripheral vision and impede multitasking, all of which are critical driving skills. But unlike with alcohol, drivers high on pot tend to be aware that they are impaired and they try to compensate by driving slowly, avoiding risky actions such as passing other cars, and allowing extra room between vehicles.

On the other hand, combining marijuana with alcohol appears to eliminate the pot smoker's exaggerated caution and it seems to increase driving impairment beyond the effects of either substance alone.

"We see the legalization of marijuana in Colorado and Washington as a wake-up call for all of us in highway safety," said Jonathan Adkins, executive director of Governors Highway Safety Association, which represents state highway safety offices.

"We don't know enough about the scope of marijuana-impaired driving to call it a big or small problem. But anytime a driver has their ability impaired, it is a problem."

Colorado and Washington are the only states that allow retail sales of marijuana for recreational use. Efforts to legalize recreational marijuana are underway in Alaska, Massachusetts, New York, Oregon and the District of Columbia. Twenty-three states and the nation's capital permit marijuana use for medical purposes.

It is illegal in all states to drive while impaired by marijuana.

Colorado, Washington and Montana have set an intoxication threshold of 5 parts per billion of THC, the psychoactive ingredient in pot, in the blood. A few other states have set intoxication thresholds, but most have not set a specific level. In Washington, there was a jump of nearly 25 percent in drivers testing positive for marijuana in 2013 — the first full year after legalization — but no corresponding increase in car accidents or fatalities.

What worries highway safety experts are cases like that of New York teenager Joseph Beer, who in October 2012 smoked marijuana, climbed into a Subaru Impreza with four friends and drove more than 100 mph before losing control. The car crashed into trees with such force that the vehicle split in half, killing his friends.

Beer pleaded guilty to aggravated vehicular homicide and was sentenced this past week to 5 years to 15 years in prison.

A prosecutor blamed the crash on "speed and weed," but a Yale University Medical School expert on drug abuse who testified at the trial said studies of marijuana and crash risk are "highly inconclusive." Some studies show a two- or three-fold increase, while others show none, said Dr. Mehmet Sofuoglu. Some studies even showed less risk if someone was marijuana positive, he testified.

Teenage boys and young men are the most likely drivers to smoke pot and the most likely drivers to have an accident regardless of whether they're high, he said.

"Being a teenager, a male teenager, and being involved in

reckless behavior could explain both at the same time — not necessarily marijuana causing getting into accidents, but a general reckless behavior leading to both conditions at the same time," he told jurors.

In 2012, just over 10 percent of high school seniors said they had smoked pot before driving at least once in the prior two weeks, according to Monitoring the Future, an annual University of Michigan survey of 50,000 middle and high school students. Nearly twice as many male students as female students said they had smoked marijuana before driving.

A roadside survey by the National Highway Traffic Safety Administration in 2007 found 8.6 percent of drivers tested positive for THC, but it's not possible to say how many were high at the time because drivers were tested only for the presence of drugs, not the amount.

A marijuana high generally peaks within a half hour and dissipates within three hours, but THC can linger for days in the bodies of habitual smokers.

Inexperienced pot smokers are likely to be more impaired than habitual smokers, who develop a tolerance. Some studies show virtually no driving impairment in habitual smokers.

Two recent studies that used similar data to assess crash risk came to opposite conclusions.

Columbia University researchers compared drivers who tested positive for marijuana in the roadside survey with state drug and alcohol tests of drivers killed in crashes. They found that marijuana alone increased the likelihood of being involved in a fatal crash by 80 percent.

But because the study included states where not all drivers are tested for alcohol and drugs, a majority of drivers in fatal crashes were excluded, possibly skewing the results. Also, the use of urine tests rather than blood tests in some

cases may overestimate marijuana use and impairment.

A Pacific Institute for Research and Evaluation study used the roadside survey and data from nine states that test more than 80 percent of drivers killed in crashes. When adjusted for alcohol and driver demographics, the study found that otherwise sober drivers who tested positive for marijuana were slightly less likely to have been involved in a crash than drivers who tested negative for all drugs.

"We were expecting a huge impact," said Eduardo Romano, lead author of the study, "and when we looked at the data from crashes we're not seeing that much." But Romano said his study may slightly underestimate the risk and that marijuana may lead to accidents caused by distraction.

Many states do not test drivers involved in a fatal crash for drugs unless there is reason to suspect impairment. Even if impairment is suspected, if the driver tests positive for alcohol, there may be no further testing because alcohol alone may be enough to bring criminal charges. Testing procedures also vary from state to state.

"If states legalize marijuana, they must set clear limits for impairment behind the wheel and require mandatory drug testing following a crash," said Deborah Hersman, former chairman of the National Transportation Safety Board. "Right now we have a patchwork system across the nation regarding mandatory drug testing following highway crashes."