

Fall driving more hazardous than summer or winter

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(PhysOrg.com) -- While many believe summer is the most dangerous season on U.S. roads because motorists tend to drive faster, drink more alcohol and drive more often for leisure, a new report by the University of Michigan suggests otherwise.

Fatality crash rates are highest in the fall, with October at the top of the list (10.2 deaths per billion kilometers), according to a study in the current issue of the journal *Traffic Injury Prevention*.

Using the fatality data and distance-driven data from the Department of Transportation, Michael Sivak of the U-M Transportation Research Institute calculated the fatality rate and per distance driven for each month from 1994 to 2006.

He found that October, November and December have the highest fatality rates and March the lowest (8.8 deaths per billion kilometers), followed by February and April. From March to October, rates increase each month and then decline from October to March, despite the winter weather.

"The risk of a fatality per distance driven in October is about 16 percent greater than the risk in March," Sivak said. "Everything else being equal, inclement weather—snow and ice—-should increase the risk of driving. However, because inclement weather also leads to general reductions in speed, the net effect is not clear."



Likewise, there are several factors more prevalent during summer that would suggest that the driving risk should be greater during those months, Sivak says.

"For example, leisure driving, which occurs more frequently on unfamiliar roads, at higher speeds, at night and under the influence of alcohol, is riskier than commuter driving," he said. "Although hard data are not available, leisure driving is likely to be most frequent during summer months when school is out. In addition, consumption of beer shows a strong seasonal variation, peaking in summer months."

So why are October, November and December more dangerous for motorists than other months of the year? One possible reason could be the duration of darkness, which increases in the fall and is longest in late December. But Sivak says there is no single cause.

"There are several known factors with major influences on the risk of driving that show strong seasonal variations," he said. "However, the peaks and troughs of the seasonal variations of these factors do not fully match the pattern of the overall <u>driving</u> risk. Thus, the driving-risk pattern is likely a consequence of joint contributions of several factors."

Provided by University of Michigan (<u>news</u>: <u>web</u>)

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