

Data show fatalities have increased since motorcycle helmet law repeal

Editor's note: This is the second of three articles which focus on reports, data and research regarding the impact of the repeal of Michigan's all-rider motorcycle helmet law in April of 2012. In our first article we shared results of a report titled Estimate of Reduction in Deaths, Injuries, and Societal Costs in 2015 Michigan Motorcycle Crashes with Helmet Use which was completed by Lidia P. Kostyniuk, Ph.D., P.E., Research Scientist, Emerita with the University of Michigan Transportation Research Institute at the request of the Skilled Motorcyclist Association - Responsible, Trained and Educated Riders, Inc., (SMARTER) a 501(c) 3 non-profit motorcyclist safety organization.

The Skilled Motorcyclist Association - Responsible, Trained and Educated Riders, Inc. (SMARTER) is a 501c3 non-profit motorcyclist safety education association. Ludington resident, retired educator and long-time motorcycle rider Dan Petterson is one of the founding members of SMARTER and currently serves as the associations president and CEO.

Petterson, who collects, analyzes and summarizes official reports and research for posting on SMARTER's website says the Michigan Traffic Crash Reporting System data show a sad trend of increased fatalities and higher fatality rates since the April 2012 repeal without any indication of an increase in ridership. "ABATE sold our elected officials a real bill of goods in 2012 and we have paid a very high price. We need to go back more than 30 years to find motorcyclist fatality numbers as high as we experienced in 2015 and 2016. We are averaging 11 more fatalities per year in the five years post repeal compared to the five years prior and we have no more riders on the road, contrary to what ABATE told our legislators."

The report Petterson refers to is released each spring to update the data for the previous year. Petterson points to what he thinks is one of the most stunning and compelling statistics – the difference between the percent of riders who die from the injuries they sustain in a crash between those who were wearing a helmet and those who were not. For example the report shows in 2016, 2.76% of helmet wearers died in their crash while significantly more than twice as many, 6.55% of riders not wearing a helmet died in their crash. "That relationship is true for every year since the helmet repeal," Petterson points out. "In other words, if a rider wants to double their chances of being killed when they crash, they can choose to not wear a helmet. That's information our association wants riders to understand from a risk standpoint. A similar thing is true for serious injuries. Not wearing a helmet increases the risk of serious injury if you get in a crash."

SMARTER board vice chairman, Don Smith, Ph.D., Professor Emeritus, Michigan State University, adds "Fatalities and injuries are not only devastating for the person injured or the families of those killed, they result in a huge dollar cost to society. The recent report from Dr. Kostyniuk, show that in 2015 alone the total societal costs would have been reduced by as much as \$200 million had every rider been wearing a helmet. That is information our elected officials should be taking note of."

SMARTER has used data for the years prior to the helmet law repeal to compare to the data for years post repeal. The associations finds that comparing yearly the averages for years 2007-2011, the five years before the helmet law was changed, to years to the yearly averages for years 2012-2016, the five years after the law change we find the average number of crashes per year have decreased 9.91% but the average number of fatalities per year have increased 8.47%.

However, SMARTER Board Chairman, Rich Henrion, cautions about the use of per year raw numbers to draw any conclusions. Henrion put on more than 25,000 miles on his BMW motorcycle last summer “The biggest impact on the number of crashes and therefore deaths and injuries is exposure or how many riders are on the road. Exposure is mostly determined by weather. If the weather is warm and dry lots riders hit the road and the opposite if it’s cold and wet. However, using averages over a 3-5 year period presents a much better picture and in this case it would appear fatalities are definitely up post helmet repeal especially noting that the average number of crashes is down.”

A common way to account for exposure is to calculate a fatality rate and the most common fatality rate used by traffic safety professionals for motorcyclists is to calculate the fatalities per 100,000 registered motorcycles. “Pre and post repeal data show the fatality rate average has increased a little more than 8%,” Petterson said. While Petterson believes the statistics are telling regarding the negative impact of the repeal he is even more convinced by actual research. “We have five Michigan specific research studies that have been conducted since repeal. When taken together with the data the evidence that repeal was a tragic mistake is very compelling.”