# The price we have paid for a small freedom (to ride a motorcycle without a helmet)

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## A steep price

Michigan citizens have paid a steep price for the small freedom which allows a few motorcyclists to ride without a helmet.

In March 2017 The Michigan Office of Highway Safety Planning (MIOHSP) released its preliminary annual statistical report which they title "Motorcycle Helmet Traffic Crash Statistics<sup>1</sup>." The report provides motorcyclist crash data for 2016 and also for each year back to 2012 when Michigan representatives and senators voted and Governor Snyder supported the repeal of our all-rider motorcycle helmet law.

With this report there is now five (5) years of Michigan specific data<sup>1</sup> to go along with four (4) Michigan specific research studies <sup>2,3,4,5</sup> conducted during this period of time. The data and the research studies support the readily available national and international research which shows helmets use works to reduce deaths and injuries in the event of a crash and when an all-rider helmet law is in effect almost every rider wears a helmet.

What has been the cost of the repeal of Michigan's all-rider helmet law? A couple bumped heads? A handful of injuries? Five (5) additional deaths and ten (10) serious injuries? Ten (10) deaths and twenty (20) serious injuries? What do you think is a reasonable cost to pay for this freedom? Fifty (50) deaths and two hundred (200) injuries?

#### **Deaths**

The new MIOHSP report provides a "death rate" for riders in crashes who were wearing a helmet and a "death rate" for riders who decided to go helmetless. In most years riders who crashed and were not wearing a helmet died at more than two times (2x) the rate of riders who were wearing a helmet. This rate is consistent with a University of Michigan study published in 2016.<sup>2</sup> On average for the years 2012-2016 for every 100 helmeted riders involved in a crash slightly less than three (3) died (2.708). For every 100 nonhelmeted riders in involved in a crash more than six (6) died (6.442).

If we assume nonhelmeted riders would have died at the same rate as helmeted riders had they been wearing a helmet at the time of their crash, we can calculate the number of deaths that would have been saved if all riders had been wearing a helmet. That number is 167.

# **Serious injuries**

The report also provides the same type of information for serious injuries. As can be expected, riders who decided to go helmetless and crashed suffer a serious injury at a higher rate than riders who were wearing a helmet at the time of their crash. Making a similar assumption, if riders who decided to not wear a helmet would instead have been wearing a helmet at the time of their crash they would have suffered serious injury at the lower helmet wearing rate, we can determine that the decision to go helmetless has cost 325 serious injuries.

In exchange for the freedom for a few riders go helmetless during the past five years Michigan citizens have sacrificed an estimated one hundred and sixty seven (167) lives and three hundred and twenty five (325) serious injuries. Let's not even address the dollars lost. How much is too much? How much is enough?

### Summary

Without considering any increased costs associated with these 167 unnecessary deaths and 325 unnecessary serious injuries, this is a very steep cost. In order to maintain support of our current "adult choice" helmet law, advocates and elected decision makers must say, "I believe the freedom for adult motorcycle riders to decide to ride without a helmet is worth us sacrificing about 33 people per year and subjecting another 65 individuals per year to the pain of serious injury and I am fine with that, plus I am OK with paying the costs associated with this increased death and injury."

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- 3. Chapman AJ, Titus R, Ferenchick H, Davis A, Rodriguez C. Repeal of the Michigan helmet law: early clinical impacts. Am J Surg. 2014;207(3):352–356.
- 4. Rebecca H. Striker, D.O., Alistair J. Chapman, M.D., Rachel A. Titus, M.D., Alan T. Davis, Ph.D., Carlos H. Rodriguez, M.D., F.A.C.S. *Repeal of the Michigan helmet law: the evolving clinical impact*. Am J Surg. Volume 211, Issue 3, March 2016, Pages 529–533.
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