



All-rider motorcycle helmet laws

Laws that require all riders to wear helmets save lives, reduce traumatic brain injuries and lower medical costs.

Helmets reduce the risk of death in a motorcycle crash by 37%-42%.^{1,2} Unhelmeted motorcyclists are 3 times more likely than helmeted riders to suffer traumatic brain injuries.¹

More than 22,000 motorcyclists are estimated to have died in crashes from 1976 to 2022 as a result of lower helmet use in states without all-rider helmet requirements, often called universal helmet laws.³ This represents 11 percent of all motorcyclist fatalities during these years.

All-rider laws raise helmet use

- ▶ In 2023, 94% of motorcyclists observed in states with universal helmet laws were wearing helmets.⁴ In states without such laws, helmet use was 72%.
- ▶ Use of helmets judged to be compliant with federal safety regulations was 83% among motorcyclists in states with universal helmet laws and 66% in states without such laws.⁴
- ▶ Helmet laws that apply only to young riders or to riders without adequate insurance are common in states without universal laws, but there is no practical way to enforce them.

Safety outcomes: evidence from the states

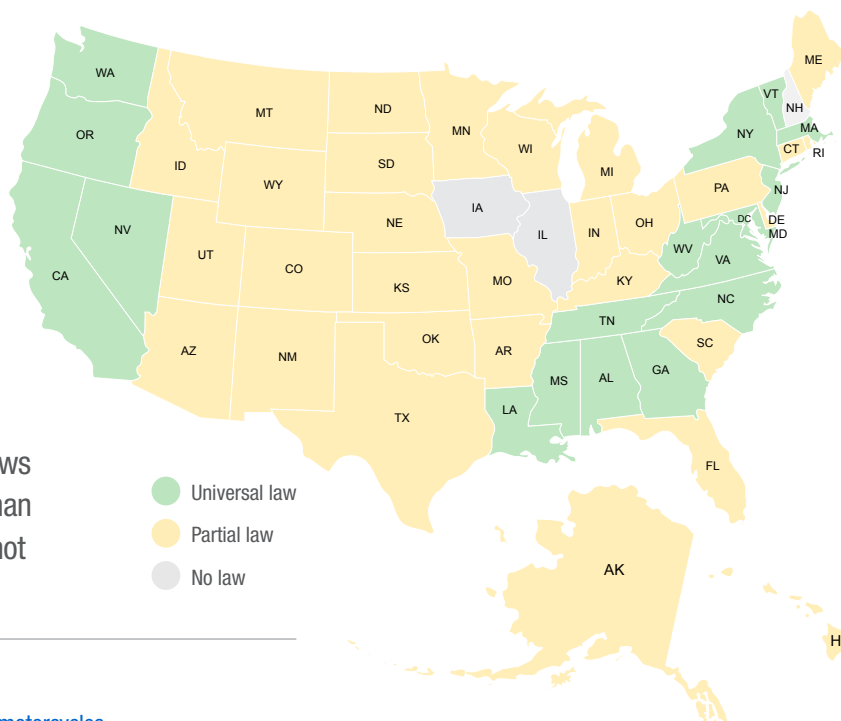
States have enacted and repealed all-rider helmet laws many times over the years, providing ample opportunity to study the effects. Generally, when states enact such laws, deaths, injuries and medical costs go down. When they repeal them, the reverse usually happens.

EFFECT ON FATALITIES OF ENACTING OR REPEALING ALL-RIDER HELMET LAWS

	Enacted or repealed?	Change in fatalities
Texas ⁵	Enacted, 1989	-12%
California ⁶	Enacted, 1992	-38%
Arkansas ⁷	Repealed, 1997	+21%
Texas ⁷	Repealed, 1997	+31%
Kentucky ⁸	Repealed, 1998	+50%
Louisiana ⁸	Repealed, 1999	+100%
Florida ⁹	Repealed, 2000	+25% per motorcycle registration
Michigan ¹⁰	Repealed, 2012	No change

Injuries and medical costs

- ▶ When Nebraska reinstated its all-rider law, serious head injuries among motorcyclists fell 22%.¹¹ Acute medical hospital charges for injured motorcyclists declined 38%.
- ▶ Hospital admissions of motorcyclists with head injuries increased 82% after Florida changed from a universal law to a partial one.¹² The average inflation-adjusted cost of treating these injuries went up from about \$34,500 to nearly \$40,000 — 4 times the \$10,000 minimum medical insurance required to ride without a helmet under the new law.
- ▶ When Michigan did away with its universal helmet requirement, the state saw a 40% increase in the average insurance payment for injuries to motorcyclists,¹³ as well as increased head injuries and neurological interventions.¹⁰



Helmet use laws today

Today, 17 states and the District of Columbia have all-rider helmet laws. Thirty states have laws covering some riders, usually people younger than 18 or 21. Illinois, Iowa and New Hampshire do not have any helmet requirements.

ADDITIONAL RESOURCES

Motorcycle safety facts and research iihs.org/research-areas/motorcycles

Motorcycle fatality statistics iihs.org/research-areas/fatality-statistics/detail/motorcycles-and-atvs

Helmet law details by state iihs.org/research-areas/motorcycles/motorcycle-helmet-laws-table

REFERENCES

- ¹ National Highway Traffic Safety Administration. (2008, January). *Motorcycle helmet use laws* (DOT HS 810 887W). nhtsa.gov/sites/nhtsa.gov/files/810887.pdf
- ² Norvell, D. C., & Cummings, P. (2002, September 1). Association of helmet use with death in motorcycle crashes: A matched-pair cohort study. *American Journal of Epidemiology*, 156(5), 483–487. doi.org/10.1093/aje/kwf081
- ³ Teoh, E. R. (2025, July). The human cost of allowing unhelmeted motorcycling in the United States. *Journal of Safety Research*, 93, 292–297. doi.org/10.1016/j.jsr.2025.03.002
- ⁴ National Center for Statistics and Analysis. (2024, September). *Motorcycle helmet use in 2023 — Overall results* (Traffic Safety Facts Research Note. Report No. DOT HS 813 634). National Highway Traffic Safety Administration. crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813634.pdf
- ⁵ Mounce, N. H., Brackett, Q. R., Hinshaw, W. M., Lund, A. K., & Wells, J. K. (1992, September). *The reinstated comprehensive motorcycle helmet law in Texas*. Insurance Institute for Highway Safety. iihs.org/research-areas/bibliography/ref/928
- ⁶ Kraus, J. F., Peek, C., McArthur, D. L., & Williams, A. (1994). The effect of the 1992 California motorcycle helmet use law on motorcycle crash fatalities and injuries. *JAMA*, 272(19), 1506–1511. doi.org/10.1001/jama.1994.03520190052034
- ⁷ Preusser, D. F., Ulmer, R. G., & Hedlund, J. H. (2000, September). *Evaluation of motorcycle helmet law repeal in Arkansas and Texas*. National Highway Traffic Safety Administration. rosap.nhtl.bts.gov/view/dot/1046
- ⁸ Ulmer, R. G., & Preusser, D. F. (2003, October). *Evaluation of the repeal of motorcycle helmet laws in Kentucky and Louisiana*. National Highway Traffic Safety Administration. rosap.nhtl.bts.gov/view/dot/1729
- ⁹ Kyrychenko, S. Y., & McCart, A. T. (2006). Florida's weakened motorcycle helmet law: Effects on death rates in motorcycle crashes. *Traffic Injury Prevention*, 7(1), 55–60. doi.org/10.1080/15389580500377833
- ¹⁰ Carter, P. M., Buckley, L., Flannagan, C. A., Cicchino, J. B., Hemmila, M., Bowman, P. J., Almani, F., & Bingham, C. R. (2017). The impact of Michigan's partial repeal of the universal motorcycle helmet law on helmet use, fatalities, and head injuries. *American Journal of Public Health*, 107(1), 166–172. doi.org/10.2105/AJPH.2016.303525
- ¹¹ Muelleman, R. L., Mlinek, E. J., & Collicott, P. E. (1992). Motorcycle crash injuries and costs: Effect of a reenacted comprehensive helmet use law. *Annals of Emergency Medicine*, 21(3), 266–272. [doi.org/10.1016/s0196-0644\(05\)80886-8](https://doi.org/10.1016/s0196-0644(05)80886-8)
- ¹² Ulmer, R. G., & Northrup, V. S. (2005, August). *Evaluation of the repeal of the all-rider motorcycle helmet law in Florida*. National Highway Traffic Safety Administration. nhtsa.gov/sites/nhtsa.gov/files/809849.pdf
- ¹³ Highway Loss Data Institute. (2017, December). The effects of Michigan's weakened motorcycle helmet use law on insurance losses — five years later. *HLDI Bulletin*, 34(36). iihs.org/media/0d9cc50f-7edc-4ce4-990e-c5e88dbfcd5/4PyfCA/HLDI%20Research/Bulletins/hldi_bulletin_34.36.pdf