

BOARD OF HEALTH

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JOHNSON COUNTY BOARD OF HEALTH POSITION STATEMENT ON HELMET USAGE BY MOTORCYCLE OPERATORS, BICYCLE OPERATORS AND THEIR PASSENGERS

The Johnson County Board of Health (JCBOH), in support of the Iowa Department of Transportation Zero Fatalities goal, has identified the use of helmets for motorcyclists, low-power cyclists (e.g. operators of a moped, scooter, or other motorized cycle), and bicyclists as an effective public health intervention which will save lives, decrease injuries and save health care costs for Iowans. The Board of Health encourages all riders to use helmets and recommends that State legislators enact laws requiring the universal use of helmets for motorcycle, low-power cycle, and bicycle operation. A universal helmet law is the most effective way to save lives and lower health care costs related to motorcycle injuries.¹ It is also effective for increasing helmet use in bicyclists, and in reducing crash-related injuries and deaths.² In addition, the Board supports public health messaging to raise awareness of the protections provided by helmet usage.

The Board has determined the following:

- Head injuries resulting from a motorcycle, low-power cycle, or bicycle accident contain a great risk for disability and death. Brain injury can temporarily or permanently impair a person's physical, cognitive, or behavioral functions.
- Helmet use among bicyclists decreased the likelihood of serious head injury and death by 35-46% in international meta-analyses.²
- Helmet use among motorcyclists has been associated with a 42% lower risk of fatality and 69% lower risk of head injury in a crash.²
- In 2020, over 350,000 bicyclists suffered from emergency treated injuries in the U.S., and there were 1186 bicyclist fatalities—403 of which were specifically attributed to traumatic brain injury.^{3,4} In Iowa, there were 297 crashes involving bicyclists in 2022, resulting in 284 injuries and 4 fatalities.⁶
- Motorcycle fatalities have been increasing throughout the U.S. in recent years; there were 82,686 motorcyclist injuries and 5,932 fatalities reported across the country in 2021.⁵ In Iowa, there were 954 motorcycle crashes resulting in 51 fatalities, and 77% of those involved did not wear helmets according to the Iowa DOT (2022).⁶

Road traffic accidents also incur economic costs including but not limited to emergency medical service (EMS) and medical care costs, lost productivity, legal and court costs, and insurance administration costs.⁷ Fatalities and disabilities caused by head injuries resulting from motorcycle and bicycle accidents cost the U.S. nearly \$44 billion annually in medical costs, with Iowa's share

of that cost at \$64 million annually.⁸ According to the National Highway Traffic Safety Administration, an estimated \$23,003,598 could have been saved in Iowa in 2017 if all motorcyclists had worn helmets⁷—more than one-third of the \$64 million annual medical cost. When the valuation for lost quality of life is added in, the full "comprehensive cost" savings estimate jumps to \$140,058,381 per year if all motorcyclists in Iowa wore helmets.⁷

Universal helmet laws are extremely effective; 96% of motorcyclists observed in states with universal motorcycle helmet laws wore helmets. Among the three states with no motorcycle helmet laws—Iowa, Illinois, and New Hampshire—helmet use among motorcyclists was observed at 57%.⁹ As the JCBOH considers helmet usage as a public health concern, the Board endorses laws that encourage the use of helmets while riding motorcycles, low-power cycles, and bicycles in order to achieve the elimination of road fatalities and injuries that could be prevented by helmet use.

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