

COMMITTEE ON LEGISLATIVE RESEARCH
OVERSIGHT DIVISION

FISCAL NOTE

L.R. No.: 4267-01
Bill No.: SB 556
Subject: Insurance - General; Insurance - Automobile; Insurance - Health; Motor Vehicles;
 Roads and Highways; Transportation
Type: Original
Date: January 16, 2018

Bill Summary: This proposal specifies when persons operating or riding a motorcycle or motortricycle must wear protective headgear.

FISCAL SUMMARY

ESTIMATED NET EFFECT ON GENERAL REVENUE FUND			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Total Estimated Net Effect on General Revenue	\$0	\$0	\$0

ESTIMATED NET EFFECT ON OTHER STATE FUNDS			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Total Estimated Net Effect on <u>Other</u> State Funds	\$0	\$0	\$0

Numbers within parentheses: () indicate costs or losses.
 This fiscal note contains 12 pages.

ESTIMATED NET EFFECT ON FEDERAL FUNDS			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Total Estimated Net Effect on <u>All</u> Federal Funds	\$0	\$0	\$0

ESTIMATED NET EFFECT ON FULL TIME EQUIVALENT (FTE)			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Total Estimated Net Effect on FTE	0	0	0

Estimated Net Effect (expenditures or reduced revenues) expected to exceed \$100,000 in any of the three fiscal years after implementation of the act.

ESTIMATED NET EFFECT ON LOCAL FUNDS			
FUND AFFECTED	FY 2019	FY 2020	FY 2021
Local Government	\$0	\$0	\$0

FISCAL ANALYSIS

ASSUMPTION

Officials from the **Department of Transportation, Department of Public Safety - Missouri Highway Patrol, Department of Corrections, Department of Insurance, Financial Institutions and Professional Registration, Office of Prosecution Services and Office of the State Public Defender** each assume the proposal will have no fiscal impact on their respective organizations.

Officials from the **Department of Health and Senior Services** assume Section 302.020.2 specifies that only individuals under eighteen years of age, or those eighteen and older with an instruction permit, must wear protective headgear at all times when operating or riding as a passenger on any motorcycle or motortricycle.

Section 302.026 adds that any qualified motorcycle operator who is eighteen years of age or older may operate a motorcycle or motortricycle without wearing protective headgear if he or she has medical payment insurance coverage with a minimum of one million dollars for injuries incurred as a result of an accident while operating a motorcycle or motortricycle.

Changing the helmet law to only require any person under eighteen years of age, or who is eighteen and older with a motorcycle instruction permit, to wear protective headgear at all times when operating or riding as a passenger on any motorcycle or motortricycle will increase the number of individuals incurring a traumatic brain injury, thus there will be an increase in participants requesting services through the following programs: Adult Brain Injury (ABI), Children and Youth with Special Health Care Needs (CYSHCN), Healthy Children and Youth (HCY), and Medically Fragile Adult Waiver (MFAW).

Individuals

Based on motorcycle crash statistics provided by the Missouri State Highway Patrol, there were 2,047 personal injuries that resulted from motorcycle crashes in 2016. Of these 2,047 injuries, 134 involved persons age 18 to 20 and 1,721 involved persons age 21 through 64. According to a National Occupant Protection Use Survey, it is estimated that half of those persons would not be wearing a helmet if this proposed legislation is passed; resulting in 67 (age 18-20) and 861 (age 21 - 64) individuals involved in a motorcycle crash while not wearing a helmet ($134 \times .50 = 67$ and $1,721 \times .50 = 861$).

ASSUMPTION (continued)

Based on assessment of other states, if 50 percent of those individuals experience a traumatic brain injury (TBI), and 50 percent of those with a TBI are eligible for program enrollments, there would be 17 additional participants dually enrolled in CYSHCN and HCY ($67 \times .50 \times .50 = 17$), with 50 percent (or 9 participants) of the HCY enrollments aging out into the MFAW program in subsequent years ($17 \times .50 = 9$), and 216 additional enrollments to the ABI Program per year ($861 \times .50 \times .50 = 216$).

Given that CYSHCN and HCY participants age out of the programs by age 21, it is estimated that the influx of these two programs' new participants will be offset each year by the out-flux of the programs' participants. The impact to the ABI and MFAW Program will be additional participants each year (additional annual impact plus the impact from the previous year) since the average length of enrollment in the program is greater than the three years estimated in this fiscal note. Given that one of the eligibility requirements for the MFAW Program is that the program participant ages out from the HCY Program, the additional impact on MFAW will not be experienced until Fiscal Year 2020.

CYSHCN

The average cost per participant for CYSHCN is \$730.05 per year. The total needed for CYSHCN services would be \$12,410.85 ($\730.05×17 participants) per year.

HCY and MFAW

Both HCY and MFAW are partially federally funded at 65.203 percent federal and 34.797 percent state Medicaid match (FY 2019 FMAP rate). The average cost per participant to provide services through the HCY program is \$24,970.82 per year. The total needed for HCY services would be \$424,503.94 ($\$24,970.82 \times 17$ participants), funded as \$276,789.30 by federal and \$147,714.64 by the state.

The average cost per participant to provide services through the MFAW program is \$99,448.46 per year. The total needed for services through the MFAW program would be \$895,036.14 (9 MFAW participants \times \$99,448.46), funded as \$583,590.41 by federal and \$311,445.73 by the state.

ABI

The current average cost per participant to provide rehabilitation services through the ABI Program is \$3,737 per year. The total needed for rehabilitation services would be \$807,192 ($\$3,737 \times 216$ participants). The increase in participants would also require the ABI Program to add six additional service coordinators, based on the fact that currently there is an average of 40 participants per service coordinator caseload.

ASSUMPTION (continued)

Service coordinators provide case management for participants enrolled in the ABI program and are contracted through local public health agencies (LPHA) at a cost of \$61,800 per service coordinator. The total needed for all six additional service coordinators would be \$370,800 (\$61,800 x 6 service coordinators).

Participation in the ABI Program is subject to available funding and without additional funding any potential new participants will be added to a waiting list for rehabilitation services. In Fiscal Year 2017, there was an average of 104 Missourians on the ABI Program wait-list, with a wait time of over 288 days before rehabilitation services were provided through the program. It is clear that additional program participants would result in the ABI Program requesting additional funding for the program.

Brain Injury Fund

Currently there is a two dollar surcharge collected for the Brain Injury Fund (Section 304.028, RSMo) from the fines assessed for each citation given for failure to wear protective headgear. If it is no longer illegal to not wear protective headgear for those age 18 and over, it would cause a decrease in the amount collected for the Brain Injury Fund.

According to the Missouri State Highway Patrol there were 542 arrests made in 2016 for failure to wear protective headgear while riding a motorcycle for those age 18 and older. Therefore it is estimated that revenue to the Brain Injury Fund will decrease by at least \$1,000 each year from the current level of collection.

Officials from the **Department of Social Services** state currently, all users of motorcycles and motortricycles are required to wear protective headgear when the vehicle is in motion. This bill clarifies that operators, riders, or passengers under the age of 18 are still required to wear protective headgear. It further requires any operator age 18 or older to wear protective headgear if they have been issued an instruction permit.

Section 302.026 is added to authorize individuals age 18 or older to operate a motorcycle or motortricycle without wearing protective headgear if he/she can show proof of the following:

- 1) Medical payment insurance coverage
- 2) Maintains proof of financial responsibility
- 3) Coverage by a health insurance policy or other form of insurance providing medical payment benefits of at least \$1,000,000.

ASSUMPTION (continued)

Missouri Healthnet Division (MHD)

MHD assumes the medical benefits provided under MO HealthNet meet the requirements as specified in the bill to operate a motorcycle without a helmet whereas uninsured individuals would be prohibited from riding a motorcycle un-helmeted. There are two categories of individuals who would sustain severe traumatic brain injuries (TBI) and result in increased MO HealthNet expenditures.

- 1) Individuals who are privately insured at the time of the accident, but sustain severe TBI and are unable to meet the higher premiums charged by private health insurance plans or are forced to spend down resources and become eligible for Medicaid because of their disability.
- 2) Individuals who are Medicaid recipients at the time of the accident and sustain severe TBI.

The Missouri State Highway Patrol reported 1,979 non-fatal injured persons resulting from motorcycle crashes in 2014. MHD assumes 95% of the injured persons were age 18 or older ($1979 * 95\% = 1,880.1$) and all individuals were meeting the current state law requiring helmet use. Based on crash statistics from the National Highway Transportation and Safety Administration, 4.7% of helmeted motorcyclists involved in a crash suffered from severe TBI whereas 7.3% of un-helmeted motorcyclists suffered from severe TBI. Therefore, MHD assumes 88.4 persons sustained severe TBI injuries in 2014 as a result of motorcycle crashes while wearing helmets ($1,880.1 * 4.7\%$). This number would increase to 137.2 individuals with severe TBI injuries if helmets were no longer required under state law ($1,880.1 * 7.3\%$). Therefore, it is estimated that 48.8 individuals will sustain severe TBI as a result of this legislation ($137.2 - 88.4$).

MHD assumes that of these 48.8 individuals, 30% will ultimately spend down their resources and qualify for Medicaid, and will be classified as totally and permanently disabled (PTD). MHD assumes that some individuals would qualify more quickly than others. MHD assumes that of those individuals with new TBIs, 15% would qualify within the first year, 22.5% would qualify within the second year, and 30% would ultimately qualify within three years. Based on these assumptions, MHD assumes 7.3 new PTD in FY 2019, 18.3 in FY 2020, and 32.9 in FY 2021. In addition, MHD assumes that TBIs will be life-long injuries; therefore, the number of individuals being served under Medicaid will continue to compound.

Based on FY 2017 annual Medicaid expenditures for a recipient with PTD trended annually by a 1.7% inflationary factor, MHD estimates an annual first year cost of \$16,319.94 per person for a total first year cost of \$119,136 in FY 2019.

ASSUMPTION (continued)

MHD further assumes that of the 48.8 individuals annually sustaining severe TBI as a result of this legislation, 8.54% (based on current Medicaid recipients ages 18-64 divided by the general Missouri population ages 18-64) will be Medicaid recipients at the time of the accident, or 4.2 individuals.

Based on a 2013 report issued by the Arkansas Spinal Cord Commission, the average acute care Medicaid costs for TBI was \$15,783 (average from 2007-2012). This initial cost was inflated by a three year average Hospital Market Basket Trend from SFY 2010 through SFY 2017. Therefore, the initial hospitalization cost is estimated to be \$20,182 per person in FY 2019 or \$84,764.4 ($\$20,182 * 4.2$ individuals).

The one-time acute care costs are in addition to the annual cost to care for a person with TBI. The average cost for a custodial parent (based on FY 2017 expenditures) is \$5,731.78. MHD assumes annual expenditures will increase to the PTD level for an annual increase of \$10,047.12 per person sustaining a TBI as a result of this legislation. This amount is trended annually by 3.8%. MHD estimates the annual costs for caring for an individual with TBI will be \$42,197.90 ($\$10,047.12 * 4.2$ individuals each year). The total annual cost for individuals who are Medicaid recipients at the time of the accident is \$126,962.30 ($\$84,764.40 + \$42,197.90$). MHD assumes that TBIs will be life-long injuries; therefore, the number of individuals being served under Medicaid will continue to compound.

This cost reflects expenditures incurred by the Division of MO HealthNet. Any Medicaid services incurred by the Department of Health and Senior Services (DHSS) and the Department of Mental Health (DMH) will be included in their responses.

MHD estimates the total impact as follows:

FY 2019: Total - \$252,516; GR - \$87,868; Federal - \$164,648
FY 2020: Total - \$499,160; GR - \$173,692; Federal - \$325,468
FY 2021: Total - \$828,291; GR - \$288,221; Federal - \$540,070

Each year, an additional 14.6 privately insured individuals would gradually become eligible for Medicaid as a result of a severe head injury sustained while riding a motorcycle without a helmet. 4.2 Medicaid recipients would sustain severe head injuries annually while riding a motorcycle without a helmet.

ASSUMPTION (continued)

Officials from the **Department of Mental Health (DMH)** assume Section 302.020.2 requires that every person under the age of eighteen years of age that is operating or riding as a passenger of a motorcycle or motortricycle must wear protective headgear. Additionally, persons eighteen years of age or older who are operating a motorcycle or motortricycle under an instructional permit shall also wear protection headgear.

Section 302.026.1 would allow for qualified persons eighteen years of age or older to operate a motorcycle or motortricycle without wearing protective headgear if he or she has medical payment insurance coverage. Additionally, a qualified rider must be covered by a health insurance policy or other form of insurance providing medical payment benefits in the minimum amount of one million dollars.

Currently, the Division of Developmental Disability (DD) waiver programs eligibility requirements mandate that a diagnosis of developmental disability be assigned prior to the age of 22 for inclusion into a waiver program. This proposal could allow for expansion of the number of eligible DD Medicaid Waiver participants, in that riders 18 to 21 years of age could sustain a traumatic brain injury (TBI) while riding without protective headgear, thereby potentially qualifying them for DD waiver services, as well as Division of Behavioral Health services due to the clinical nature and symptoms of TBI.

Data from the Missouri State Highway Patrol, United States Census Bureau, Centers for Disease Control, and fiscal data from the Division of Developmental Disabilities were utilized to arrive at an estimated fiscal impact.

For this analysis, the DMH assumes riders 18-21 years of age would be in compliance with section 302.026.1 at the time of a motorcycle crash resulting in TBI, and would carry the proposed minimum medical payment or other insurance coverage of \$1M. Given the nature of treating TBI in a hospital setting and current inpatient healthcare costs, we assume this amount of coverage would serve to defray or cover an individual's medical bills, but would not serve as a mitigating eligibility factor for future placement in a DMH waiver program.

Crash Rates

The MO State Highway Patrol reports 1,683 personal injury motorcycle crashes in 2005, injuring 1,978 people. By 2012 those figures had risen to 2,065 and 2,404 respectively (MO State Highway Patrol, 2014). The State's eight-year average for motorcycle crashes between 2005 and 2012 is 1,854 and 2,165 for persons injured (Missouri State Highway Patrol, 2014). In 2011 and 2012, the number of crashes increased 9% over each preceding year.

ASSUMPTION (continued)

Based on available data, projections indicate Missouri will have experienced an average of 2,148 motorcycle crash injuries per year between 2016 and 2020.

State Demographics

The United States Census Bureau estimates that in 2013 the percentage of persons aged 18 to 21 years old residing in Missouri comprised 6% of the total state population, or 362,650 persons out of 6,044,171 (US Census Bureau, 2014).

Head Injury Rate of Occurrence

The federal Centers for Disease Control reports an incidence rate for head injury requiring hospitalization of 81.2 per 100,000 people aged 16 to 22 (Centers for Disease Control, 2014). Comparing this data to the census data previously discussed yields an estimate of 273 persons aged 18 to 21 per year in Missouri who will experience a head injury requiring hospitalization (persons aged 18 to 21 in MO / CDC unit of measurement x CDC incidence rate)

DD Community Placements & Cost Estimate

In 2015, the Division of DD admitted 24 individuals with head injuries.

DD estimates an average cost per day of \$380 (\$138,700/yr.) for residential services. The state share of this cost in FY 2019 is \$48,263 ($\$138,700 \times 34.797\%$ state share = \$48,263).

Estimated Annual Fiscal Impact

Assuming a 15% rate of TBI incidence due to motorcycle crashes for each year between 2018 and 2022 for individuals aged 18 to 21 in Missouri, a total of 95 additional individuals or 19 people per year could become eligible for DD waiver services and DBH services.

Utilizing the Division of DD's cost estimates for FY 2019, this represents an annual increased cost to the DMH of \$916,997 of general revenue per year ($\$48,263 \times 19 = \$916,997$).

Officials at the **Department of Revenue** assume the following regarding this proposal:

§302.020.2

The proposed legislation adds language stating every person under the age of eighteen shall wear protective headgear when operating or riding as a passenger on any motorcycle or motortricycle. Any person eighteen years of age or older operating any motorcycle or motortricycle who has been issued an instruction permit shall wear protective headgear at all times.

ASSUMPTION (continued)

§302.026.1

The proposed legislation adds language for any motorcycle operator eighteen years of age or older may operate a motorcycle or motortricyle without wearing protective headgear if he or she has medical insurance coverage. The health insurance policy or other form of insurance providing benefits with a minimum amount of one million dollars for injuries incurred because of an accident while operating a motorcycle or motortricyle.

§302.026.2

Proof of coverage will be required upon request by authorized law enforcement by showing a copy of the qualified operator's insurance card.

Administrative Impact

To implement the proposed changes, the Department will be required to:

- Update website;
- Update Missouri Driver Guide; and
- Update Missouri Motorcycle Manual.

FY 2019 - Driver License Bureau

Management Analysis Spec II	20 hrs. @ \$20.57 per hr.	= \$411
Revenue Manager Band I	10 hrs. @ \$25.05 per hr.	= <u>\$251</u>
Total		= \$662

FY 2019 - Personnel Services Bureau

Administrative Analyst III	20 hrs. @ \$19.43 per hr.	= \$389
Management Analysis Spec I	20 hrs. @ \$18.42 per hr.	= <u>\$368</u>
Total		= \$757

Total Cost **\$1,419**

The Department assumes it will be able to absorb the above listed costs. If multiple bills pass which require Department resources and updates, the Department could request additional FTE and related equipment and expenses through the appropriation process.

ASSUMPTION (continued)

Oversight assumes some people 18 and over could choose not to wear protective headgear as a result of this proposal. Accordingly, there may be an increase in injuries or the severity of injuries to motorcyclists not wearing protective headgear which may **indirectly** result in increased costs to the state. Oversight assumes no **direct** fiscal impact to state and local governments from the protective headgear exemption.

Oversight also assumes the Department of Health and Senior Services and the Department of Mental Health will request increased appropriations depending on the actual increases in TBI paid for by the state.

<u>FISCAL IMPACT - State Government</u>	FY 2019 (10 Mo.)	FY 2020	FY 2021
	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

<u>FISCAL IMPACT - Local Government</u>	FY 2019 (10 Mo.)	FY 2020	FY 2021
	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

FISCAL IMPACT - Small Business

No direct fiscal impact to small businesses would be expected as a result of this proposal.

FISCAL DESCRIPTION

The proposed legislation specifies when persons operating or riding a motorcycle or motor-tricycle must wear protective headgear.

This legislation is not federally mandated, would not duplicate any other program and would not require additional capital improvements or rental space.

SOURCES OF INFORMATION

Department of Transportation
Department of Health and Senior Services
Department of Social Services
Department of Mental Health
Department of Revenue
Department of Public Safety - Missouri Highway Patrol
Department of Insurance, Financial Institutions and Professional Registration
Office of Prosecution Services
Office of the State Public Defender
Department of Corrections

Ross Strobe

A handwritten signature in black ink, appearing to read "Ross Strobe", with a stylized flourish at the end.

Acting Director
January 16, 2018