

Bicycle-Related Injuries – Data Brief

The Statewide Incident Reporting Network

Background

In the United States (US), bicyclists face a higher risk of crash-related injury and death than occupants of motor vehicles. In 2013 in the US over 900 bicyclists were killed and 494,000 visited the emergency department for an injury. These injuries and deaths resulted in \$10 billion in lifetime medical costs and productivity losses¹. In Vermont, Highway Safety Alliance data shows that there are, on average, 70 to 80 major crashes involving bicyclists reported by law enforcement each year². This does not reflect the significant number of less serious crashes that occur on a more frequent basis. According to The League of American Bicyclists, Vermont has seen an increase of 70% to 100% in people commuting by bicycle since 2005³.

This data brief describes data and trends of bicycle-related injuries in Vermont from 2014 to 2016 that resulted in Emergency Medical Services (EMS) being activated.

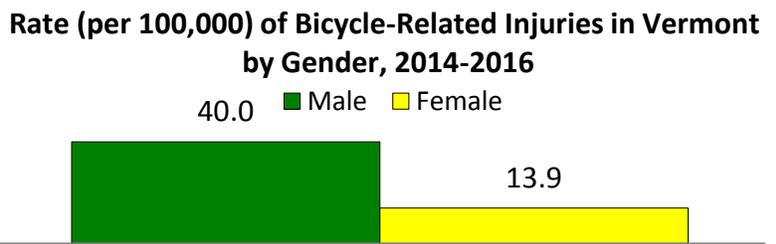
Data were gathered from the Statewide Incident Reporting Network (SIREN), Vermont’s pre-hospital electronic documentation database. For more information about SIREN, including its strengths and limitations, please see the “What is SIREN?” document on the Health Department website.

Overall

From 2014 to 2016 there were 505 injuries to Vermont residents related to bicycle crashes that resulted in an EMS call. This represents a rate of 26.9 per 100,000. 82.8% of these injuries required transport by EMS.

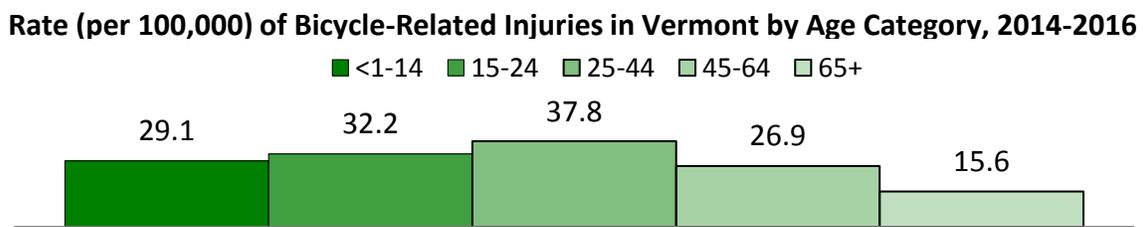
Gender

Males had a statistically significantly higher rate of bicycle-related injury than females. The rate among males (40.0 per 100,000) was almost three times the rate among females (13.9 per 100,000).



Age

Vermonters 65 and older had statistically significantly lower rates of bicycle-related injuries than all other age groups (15.6 per 100,000). Rates of injury were similar among all other age groups, ranging from 26.9 per 100,000 among those 45 to 64 to 37.8 per 100,000 among those 25 to 44. Differences among the other age groups were not statistically significant.



¹ CDC, Bicycle Safety, <https://www.cdc.gov/motorvehiclesafety/bicycle/>

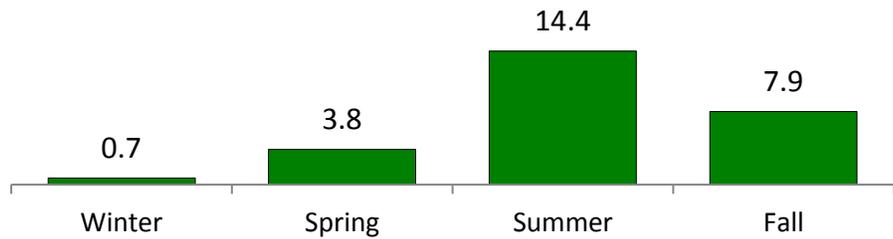
² Vermont Highway Safety Alliance, <http://vermonthighwaysafety.org/data/>

³ The League of American Bicyclists, <http://www.bikeleague.org/commutingdata>

Seasonal Variation

The differences in rate of bicycle-related injury by season in Vermont were all statistically significant. The highest rate (14.4 per 100,000) was seen during the summer months of June, July, and August, while the lowest rate was seen during the winter months of December, January, and February (0.7 per 100,000).

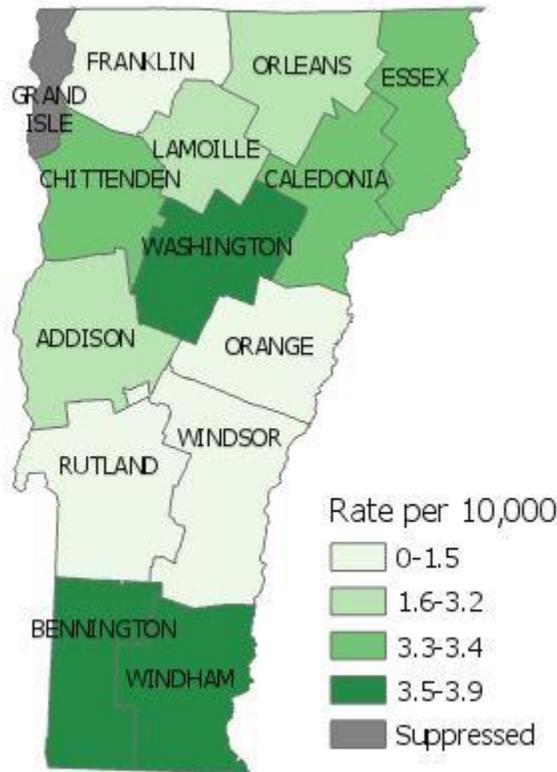
Rate (per 100,000) of Bicycle-Related Injuries in Vermont by Season, 2014-2016



County

There were no statistically significant differences in rate of bicycle-related injuries in Vermont from county to county.

Rate (per 10,000) of Bicycle-Related Injuries in Vermont by County, 2014-2016



For more information regarding SIREN data, please contact Lauren Prinzing, MPH at: lauren.prinzing@vermont.partner.gov