

Motor Vehicle Crash Injuries, Unrestrained Occupants – Data Brief

The Statewide Incident Reporting Network

Background

For adults and children who are the proper age and size, seatbelts are the most effective way to prevent injury and death due to a motor vehicle crash. In the United States in 2014, more than half of teens and adults who died in motor vehicle crashes were unrestrained at the time of the crash¹. The risk of serious injury and death is reduced by half for adults and older children when seatbelts are used. For younger children, a car seat or booster seat (as appropriate for age, weight, and height)² achieves the same reduction in risk of injury and death. According to the 2012 National Occupant Protection Use Survey, 86% of all American drivers and front seat passengers wear seatbelts. According to the 2012 State Observational Study of Seatbelt Use, 84% of drivers and front seat passengers in Vermont wear seatbelts³.

This data brief describes data and trends of unrestrained motor vehicle occupant-related morbidity and mortality 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, please see the “What is SIREN?” document on the Health Department website.

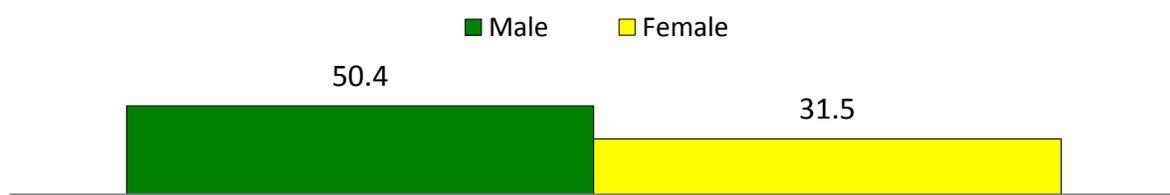
Overall

From 2014 to 2016 there were 722 injuries in Vermont among Vermont residents who were unrestrained occupants during a motor vehicle crash that resulted in an EMS call. This represents a rate of 38.5 per 100,000 people. 88.4% of these injuries resulted in transport by EMS. 1.1% of these injuries resulted in death at the scene of the crash.

Gender

There was a statistically significant difference in the rate of unrestrained occupant-related injuries in Vermont during this 3-year time. The male rate of 50.4 per 100,000 was higher than the female rate of 31.4 per 100,000.

Rate (per 100,000) of Unrestrained Occupant Injuries in Vermont by Gender, 2014-2016



Age

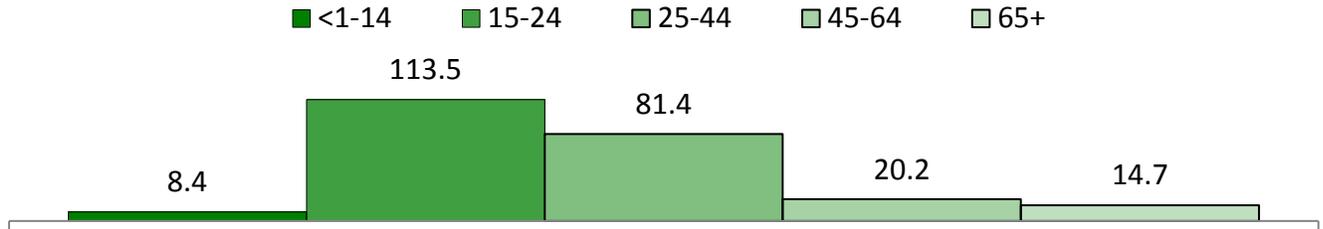
Vermonters ages 15 to 44 had statistically significantly higher rates of unrestrained occupant injury than Vermonters in other age groups. The rates seen among those 15 to 24 years of age (113.5 per 100,000) and 25 to 44 years of age (84.4 per 100,000), were four to five times higher than the rates seen among all other age groups.

¹ CDC, Seat Belts: Get the Facts, <https://www.cdc.gov/motorvehiclesafety/seatbelts/facts.html>

² CDC, Child Passenger Safety, https://www.cdc.gov/motorvehiclesafety/child_passenger_safety/index.html

³Buckle Up: Restraint Use in Vermont, https://www.cdc.gov/motorvehiclesafety/pdf/seatbelts/restraint_use_in_vt.pdf

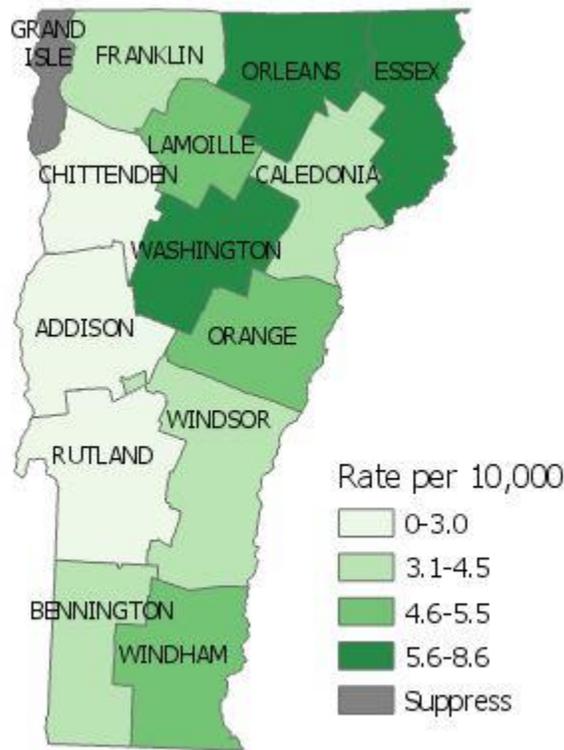
Rate (per 100,000) of Unrestrained Occupant Injuries in Vermont by Age Category, 2014-2016



County

Rates of unrestrained occupant-related injury were similar across Vermont counties, with the exception of Essex and Orleans counties. Essex county had a rate of 8.6 per 10,000 residents, while Orleans county had a rate of 8.1 per 10,000 residents. However, these rates were not statistically significantly different than the rates of other Vermont counties.

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



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