

Recreational Vehicle Injuries – Data Brief

The Statewide Incident Reporting Network

Background

According to the U.S. Consumer Product Safety Commission (CPSC), there were approximately 340 All-Terrain Vehicle (ATV)-related deaths and 97,200 ATV-related injuries treated at emergency departments in the United States in 2015. Approximately 20% of all ATV-related fatalities since 1982 have occurred among children under the age of 16¹. It is estimated that snowmobiles, which often exceed 600 pounds and can travel over 90 mph, are responsible for 200 deaths and 14,000 injuries in the United States annually². The U.S. Coastguard reports that recreational boating accidents resulted in 626 deaths and 2,613 injuries in 2015³. Vermont is a rural state, in which ATV and snowmobile use, as well as recreational boating, are common activities. Therefore, potential injuries as a result of these activities are of concern for the Health Department.

This data brief describes data and trends of recreational vehicle-related injuries in Vermont from 2014 to 2016 that resulted in Emergency Medical Services (EMS) being activated. For the purposes of this data brief, a recreational vehicle-related injury is defined as having occurred during the operation of an ATV, snowmobile, or boat.

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.

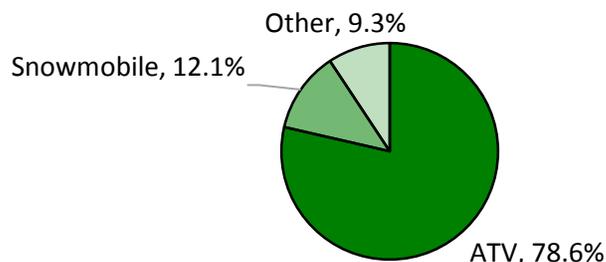
Overall

From 2014 to 2016 there were 224 injuries to Vermont residents who were operating or riding on a recreational vehicle that resulted in an EMS call. This represents a rate of 11.9 per 100,00 residents. 88.4% of these injuries resulted in transport by EMS, while 1.3% resulted in death at the scene of the crash.

Cause of Injury

78.6% of recreational vehicle-related injuries occurred during operation of an ATV, 12.1% occurred during operation of a snowmobile, and 9.3% occurred during the operation of an “other” vehicle, such as a boat.

Cause of Recreational Vehicle Injury in Vermont, 2014-2016



Gender

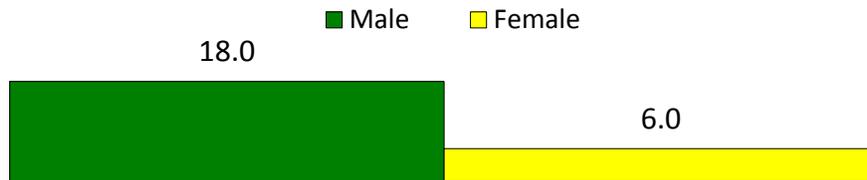
The rate of recreational vehicle-related injury was three times higher among Vermont men (18.0 per 100,000) than it was among Vermont women (6.0 per 100,000). This gender difference was statistically significant.

¹ U.S. Consumer Product Safety Commission, 2015 Annual Report of ATV-Related Deaths and Injuries, https://www.cpsc.gov/s3fs-public/atv_annualReport2015.pdf

² Pierz, J (2013). Snowmobile Injuries in North America. <https://www.ncbi.nlm.nih.gov/pubmed/12671482>

³ United States Coastguard, 2015 Recreational Boating Statistics, <http://www.uscgboating.org/library/accident-statistics/Recreational-Boating-Statistics-2015.pdf>

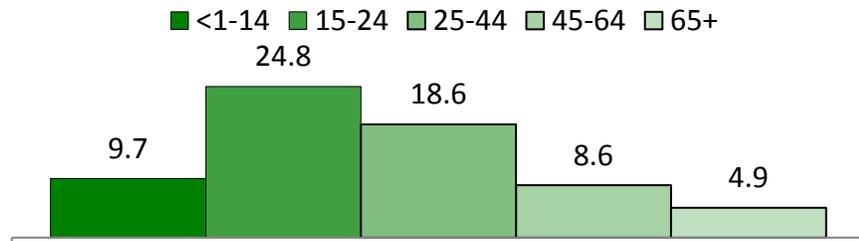
Rate (per 100,000) of Recreational Vehicle Injuries in Vermont by Gender, 2014-2016



Age

Among Vermont residents, those 15-44 years of age had statistically significantly higher rates of recreational vehicle-related injury than other age groups. Among those ages 15 to 24, the rate was 24.8 per 100,000 and among those ages 25 to 44, the rate was 18.6 per 100,000.

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



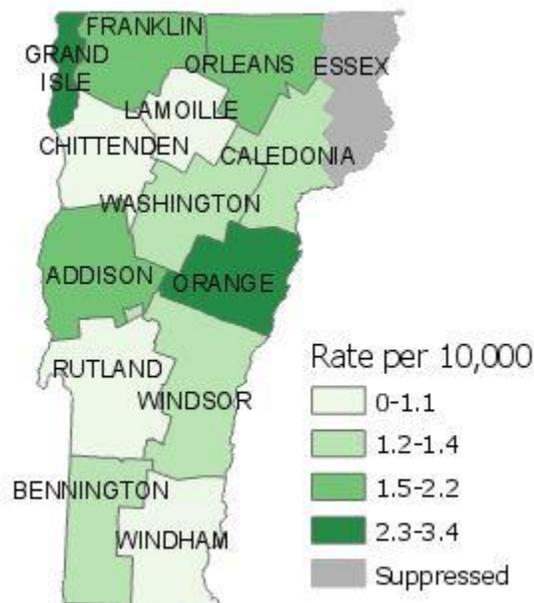
Seasonal Variation

The highest rate of recreational vehicle injury (5.2 per 100,000) was seen during the summer months (June, July, and August). This difference was statistically significant. Rates were the same (2.5 per 100,000 in the spring and fall months), and the lowest in the winter months (1.9 per 100,000).

County

Differences in rate of recreational vehicle-related injuries across Vermont counties during this time period were not statistically significant.

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



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