

# Utah Trauma Update: *All-Terrain Vehicle Injuries on the Rise*

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Utah Department of Health

## Introduction

Use of all-terrain vehicles (ATVs) is a popular form of recreation in Utah. Since the introduction of ATVs, they have also gained popularity as helpful farm and ranch equipment and are increasingly becoming a popular hunting vehicle. A study conducted by the U.S. Consumer Product Safety Commission indicated that between 1997 and 2001, the number of ATV-related injuries treated in U.S. emergency rooms increased by 104%.<sup>1</sup>

The purpose of this fact sheet is to identify current trends in ATV injuries in Utah, the populations at highest risk for these injuries, and where the injuries occur. Information contained in the Utah Statewide Trauma Registry (2001 through 2005) was used to identify serious ATV injuries treated in Utah hospitals. To be included in the Registry, ATV injuries must result in at least a two-day hospital stay, require a helicopter transport for medical care, require transfer from a local hospital to a trauma center, or result in death while hospitalized.

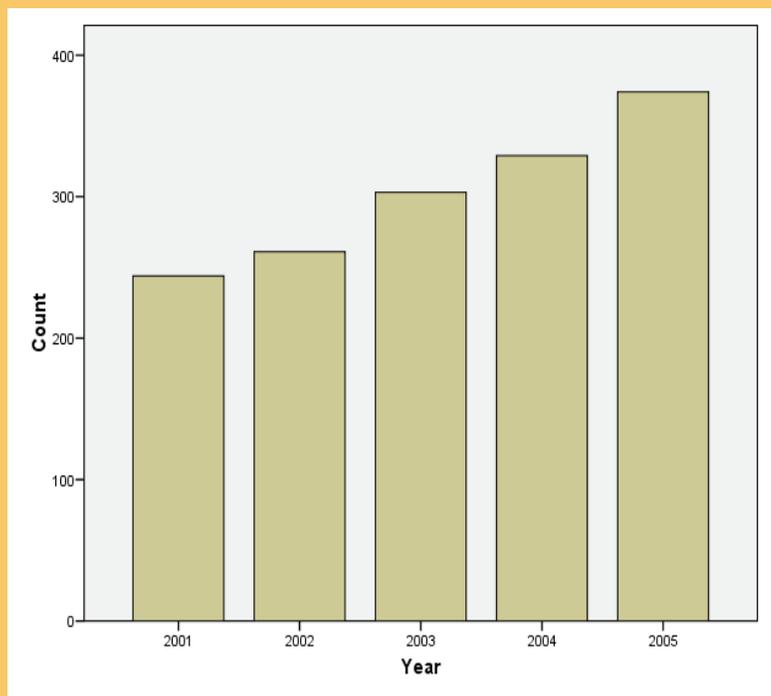
## Are ATV Injuries on the Rise?

During the time period of interest (2001 through 2005), ATV injuries represented 20% of all motor vehicle-related injuries, including injuries from auto and motorcycles crashes. Nearly as many Utahns were seriously injured on ATVs (1,511) as on motorcycles (1,817). The data in Figure 1 suggest the number of serious ATV-related injuries has increased by 53% from 2001 to 2005.

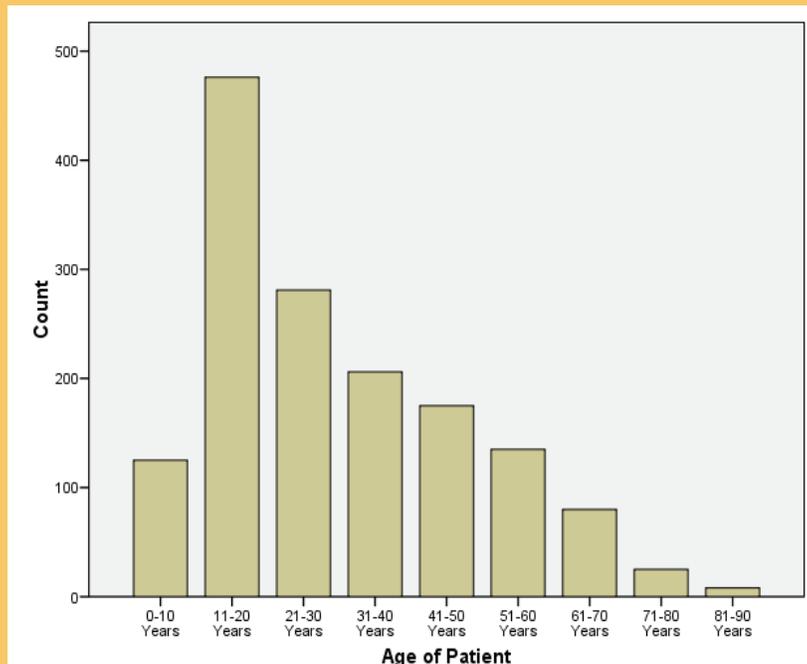
## Who is Most Likely to be Injured on ATVs?

Figure 2 shows that serious ATV injuries occur most often among younger populations. The injury rate among Utahns 11 to 20 years of age is nearly 200% higher than among 21- to 30-year-old Utah residents. A noteworthy number of children under the age of 10 were seriously injured (128). When considering safety equipment, only 22% of seriously injured Utahns were wearing a helmet at the time of injury. Younger populations were significantly less likely to be wearing a helmet at the time of injury than older Utahns injured on an ATVs.

**Figure 1** Number of serious ATV-related injuries contained in the Utah Trauma Registry (2001 through 2005) by year



**Figure 2** Number of serious ATV-related injuries contained in the Utah Trauma Registry (2001 through 2005) by age of patient



These findings should be considered in relation to current Utah State Requirements for ATV use. In Utah, children  $\leq 8$  years of age may not operate an ATV on public land. In addition, helmet use is required for ATV riders younger than 18 years and passengers are not allowed on single-use vehicles, which represent the majority of ATVs. At the time of injury, only 29% of seriously injured Utahns under the age of 18 were wearing a helmet.

### When do ATV Injuries Most Often Occur?

Most ATV injuries occur during recreational riding, increasing the frequency of injury on week-ends. Figure 3 shows that many ATV injuries also occur on Monday, suggesting that injuries are sustained during vacations (or excursions) over three-day holidays. During the summer months (May through August), more children and young adults were hospitalized for ATV injures (339) than were hospitalized for all forms of intentional injury (assault, gunshot, stabbing, etc. [224]).

### Where do ATV Injuries Happen?

Figure 4 supports the notion that most ATV injuries are associated with vacations (or excursions) to popular recreational areas. For example, while 9% of all hospitalized ATV injuries occurred in Juab County, only 0.4% of Utahns live in Juab county. Many counties with higher than expected ATV injury rates include popular ATV recreational areas, such as "Little Sahara" in Juab County and "Coral Pink Sand Dunes" in Washington County.

### Conclusion

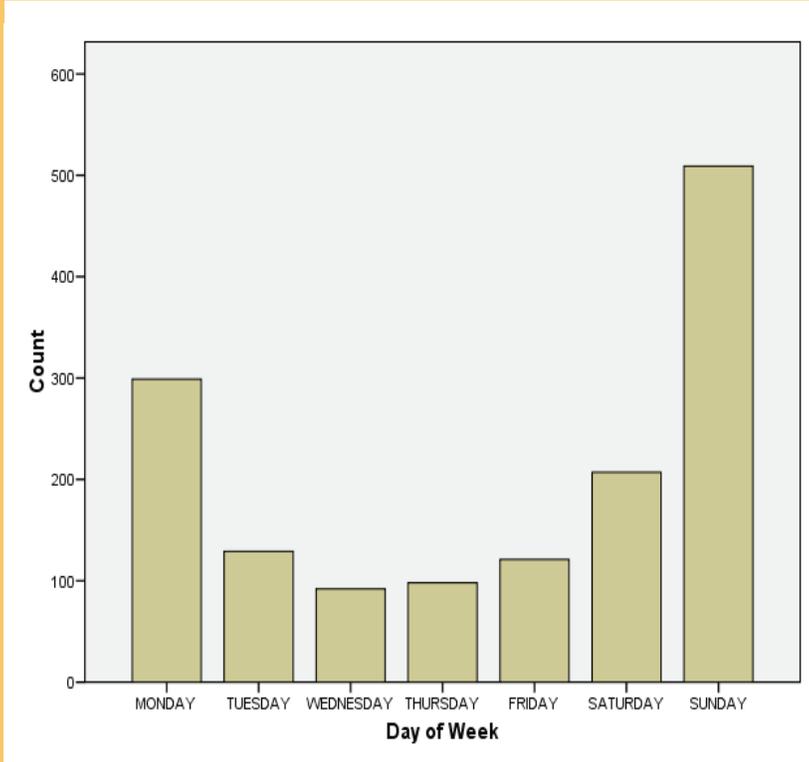
Serious injuries resulting from ATV use are on the rise in Utah and specific groups of riders are more prone to injuries. Youth under the age of 16 are inexperienced operators of motorized vehicles, particularly during their first year of driving.

For a brochure on ATV safety and training, contact the Utah Division of Parks and Recreation Off Highway Vehicle Education office at 801-538-7433 or 800-OHV-RIDE.

References:

1. All-Terrain Vehicle 2001 Injury and Exposure Studies," U.S. Consumer Product Safety Commission, Directorate for Epidemiology, January 2003.

**Figure 3** Number of serious ATV-related injuries contained in the Utah Trauma Registry (2001 through 2005) by injury day of the week.



**Figure 4** Number of serious ATV-related injuries contained in the Utah Trauma Registry (2001 through 2005) by county of injury

