



News Articles, Safety

Study: Off-road vehicle injuries drop after new law takes effect

by Melissa Jenco, News Content Editor

The number of children injured in off-road vehicle (ORV) accidents in Massachusetts dropped significantly after the state implemented new regulations, researchers found.

Age limits, training requirements and engine restrictions all likely played a role, according to the study "Age Legislation and Off-Road Vehicle Injuries in Children," (Flaherty MR, et al. *Pediatrics*. Sept. 11, 2017, <https://doi.org/10.1542/peds.2017-1164>).

Over the past 30 years, more than 3,000 children have been killed in accidents involving all-terrain vehicles, a type of ORV with a high center of gravity and high speeds, according to the study. Since 1987, the Academy has advocated for measures to improve ORV safety and its **most recent policy** called for ATV users to be at least 16 years old along with other restrictions.

In 2010, Massachusetts implemented a new law requiring ORV users to be at least 14 years old, restricting engine sizes and requiring users ages 14-17 to be trained and supervised by an adult. All ORV riders must wear helmets.

To gauge the effectiveness of the law, researchers analyzed data on emergency department (ED) and inpatient hospital discharges in Massachusetts from 2002-'13. They found 3,638 ED discharges and 481 inpatient discharges during that time.

After Massachusetts implemented the law, ED discharges related to ORV crashes decreased 33% for children ages 0-9, 50% for ages 10-13 and 39% for ages 14-17. There was no significant change in ED visits for adults ages 25-34 who weren't included in the new regulations. The 14- to 17-year-olds had the highest rates of ED visits for ORV crashes with 52 per 100,000 before the law and 31.8 per 100,000 after the law.

Inpatient hospitalizations also declined following the new law, dropping 41% for all children 17 and younger compared with 26% for 25- to 34-year-olds.

"These results support the recommendations of professional societies that more stringent ORV age restrictions may contribute to decreased morbidity," authors wrote.

Resources

- [HealthyChildren.org website on summertime safety, including ATV use](#)
- [AAP News story "Study: ATV injury rate relatively unchanged"](#)