

# **Specialty Vehicle Institute of America**

## **Special Report Summer 2007**

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## About the Specialty Vehicle Institute of America

The Specialty Vehicle Institute of America, based in Irvine, California, is a not-for-profit trade association sponsored by Arctic Cat, BRP, Bush Hog, Honda, John Deere, Kawasaki, KYMCO, Polaris, Suzuki, Tomberlin and Yamaha. The organization was formed in 1983, to promote the safe and responsible use of All-Terrain Vehicles (ATVs) through rider training programs, public awareness campaigns, and state legislation, and serves as a resource for ATV research, statistics, and vehicle standards.

**ARCTIC CAT**



**HONDA**



JOHN DEERE

**Kawasaki**



## What is an All-Terrain Vehicle?

In 1985, the Specialty Vehicle Institute of America began development of a standard, which established the requirements for equipment, configuration, and performance of four-wheel all-terrain vehicles in the United States. In 1990, the American National Standards Institute approved the first standard for all-terrain vehicles. In 2001, the standard was revised to modify certain definitional language and add several provisions to enhance and clarify the standard. SVIA is currently engaged in maintaining the 2001 standard as required by ANSI to ensure it reflects the ATV marketplace.

An all-terrain vehicle is defined as a motorized off-highway vehicle designed to travel on four low pressure tires, having a seat designed to be straddled by the operator and handlebars for steering control. ATVs are subdivided into two types as designated by the manufacturer. Type I ATVs are intended for use by a single operator and no passenger. Type II ATVs are intended for use by an operator or an operator and a passenger, and are equipped with a designated seating position behind the operator designed to be straddled by no more than one passenger.



## All-Terrain Vehicle Sizes

ATVs are not one size fits all. The ATV industry has recommendations for the age of the rider and the size of ATV. It is recommended that youth 6 and older ride an ATV with an engine size less than 70 cubic centimeters. Youth 12 and older should only ride an ATV with an engine size of 90 cubic centimeters or less. Only youth aged 16 years or older should be allowed to ride an ATV with an engine size greater than 90 cubic centimeters.

Age 6 and older (Y6)

Age 12 and older (Y12)

Age 16 and older (Adult)

Nearly 90 percent of all youth ATV-related injury incidents involve a youth riding an adult-sized ATV, meaning an ATV with an engine size greater than 90 cubic centimeters.

Even though a child is of the recommended age to ride a particular size ATV, not all children have the strength, skill or judgment needed to operate an ATV. Parents should supervise a child's operation of the ATV at all times and should allow continued use only if they determine that their child has the ability and judgment to operate an ATV safely.

There is no sure way to predict whether a child will be able to ride an ATV safely. However, to aid in the decision-making process, parents and guardians should carefully consider their child's:

- Physical development
- Social and emotional development
- Reasoning and decision-making ability
- Visual perception and motor development



## Youth ATV Models

Youth model ATVs are manufactured with the following features:

- **Speed Limiting Device**
  - Requires tool to adjust
  - Limits speed to a maximum of 10 mph (Y6) and 15 mph (Y12)
  - Set to limited speed when delivered from manufacturer
- **Maximum Unrestricted Speed**
  - 15 mph for Y6 category
  - 30 mph for Y12 category
- **Lighting**
  - No headlamp or taillamp
- **Remote Engine Cut-Off Switch (Selected Models)**



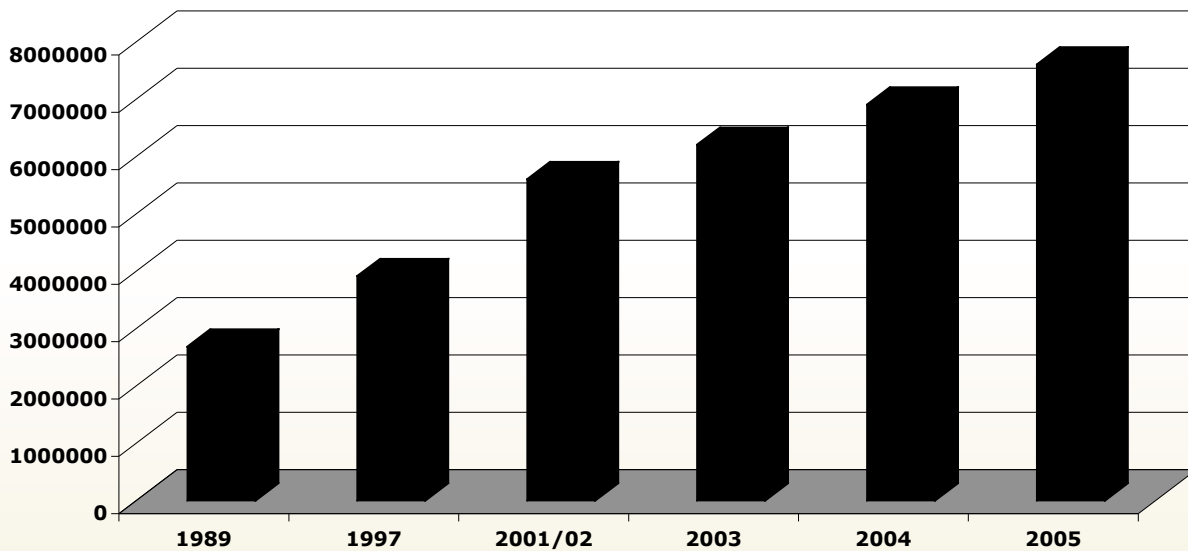
## ATV Market Information

Annual sales of ATVs have increased over 200 percent since 1995 to an estimated 856,000 units in 2006.

There are over 7 million ATVs in use in the United States, being operated by more than 16 million Americans. The median age of an ATV owner is 37 years old, and nearly a third of owners are between the ages of 24-38. ATV owners have a median annual household income of \$52,800. Over a quarter of ATV owners classified themselves as blue-collar laborers, and more than half gave their level of education as high school or less. Other facts about ATV owners:

- 58 percent are married
- 86 percent are male
- 23 percent have professional/managerial occupations
- 75 percent ride as a family recreational activity

## U.S. ATV Population Trend



## Lifetime Learning Program Reaches Out to Children and Parents

Working with Lifetime Learning Systems, a division of Weekly Reader, SVIA's member companies sponsored a public education program initiative to reduce ATV accidents and injuries among children and adolescents.

The goal of the program is to educate young ATV operators, their families and community leaders about the safe and responsible use of ATVs and the impact that ATV use has on the environment.

Teachers, parents and students, as well as community agencies and organizations such as police and fire departments, 4-H clubs and ATV rider groups have used the program.



Lifetime Learning has developed and distributed "Protect Yourself. Protect the Planet." kits to 20,000 middle schools and high schools in rural areas nationwide that were used in the classroom in the spring of 2005.

The kits include a teacher and community leader guide, student activity booklet, parent take-home brochure and classroom poster designed to enhance awareness among young people in grades 5 – 12 about the important safety and environmental considerations of ATV use.

The program materials also remind parents of their responsibility in ensuring their child is properly trained and supervised when riding an ATV.

Based on historical experience, Lifetime Learning estimates that each school kit is used by three teachers, seen by 300 students, and by one parent or guardian per child.

This means the program has the potential of reaching more than 5.4 million children and adults with messages regarding the appropriate size ATVs for children, the need for helmets and protective gear, and the "golden rules" for safe ATV operation.



## **ATV Industry's Call-to-Action for Improving ATV Safety**

ATV rider safety is the top priority of the major ATV manufacturers, their dealers, distributors, and the riding community. Collectively, the industry believes the most effective way to reduce ATV-related injuries is through a three-pronged approach that includes:

1. Enforceable State and Federal Legislation
2. Rider Training and Education
3. Parental Supervision

The most effective way to further strengthen ATV safety is through state legislation. As with safety measures for other motorized vehicles such as automobiles and motorcycles, state legislation is needed to regulate ATV use. Reinforced by federal legislation focusing on the product to make sure they are in compliance with the current vehicle standard and provided with appropriate product support.



The ATV industry strongly supports the enactment and enforcement of state legislation that enhances ATV rider safety, and has long promoted the Specialty Vehicle Institute of America's model state legislation that imposes age limits and other restrictions on ATV operation.

Member companies of the ATV Safety Institute offer free training nationwide to purchasers of new ATVs. The ATV Safety Institute's ATV RiderCourse is a hands-on training course conducted by a licensed Instructor. The course offers students an opportunity to increase their safety knowledge and to practice basic riding skills in a controlled environment. Since 1989, the ATV Safety Institute has trained 750,387 students.

The final important element is parental or adult supervision for all riders under the age of 16. Parents and guardians literally hold the key to a child's safety. Every ATV has an ignition key, and the person who controls the key, controls the use. Parental supervision is a key element for a child's safety; children under the age of 16 should be supervised at all times when riding an ATV.

## **Specialty Vehicle Institute of America's Model State ATV Legislation**

The majority of ATV-related accidents and fatalities involve behaviors that the industry warns against in its rider education programs, in all its literature, and on-vehicle labels. Since 1986, the ATV industry has advocated for state legislation that aims to regulate these problematic behaviors. The primary safety components of the model law include:

### **Education and Training**

Provides for state implementation of a comprehensive ATV safety education and training program. The program shall provide for the hands-on training of ATV operators. All persons operating an ATV on public land shall have a safety certificate. Except as provided, all operators seeking a safety certificate must receive training. Provides for certification of safety instructors. Fees collected for training and certificates shall be retained in a dedicated fund to support the ATV safety training and education program.

### **Age Restrictions<sup>i</sup>**

- (a) ATVs with engine capacity 70 cc up to and including 90 cc shall be operated on public land only by those aged 12 and older.
- (b) ATVs with engine capacity greater than 90 cc shall be operated on public land only by those aged 16 and older.
- (c) Persons under age 16 shall be under continuous adult supervision while operating an ATV on public land.

### **ATV Equipment Requirements when Operated on Public Land**

- (a) Lighted headlamp and tail lamp when operated during hours of darkness;
- (b) Brake system maintained in good operating condition;
- (c) Effective muffler system in good working condition;
- (d) Effective spark arrester in good working condition.

### **ATV Operator Prohibitions on Public Land**

- (a) Operation in a careless or reckless manner so as to endanger or to cause injury or damage to any person or property.
- (b) Operation on any public street, road, or highway of this state except for purposes of crossing, as specified.
- (c) Operation unless wearing eye protection and an approved safety helmet.
- (d) Carrying of a passenger, unless designed by manufacturer to carry one passenger.
- (e) Operation while under the influence of alcohol or any controlled substance, or under the influence of a prescription or non-prescription drug that impairs vision or motor coordination.

### **ATV Retailer Prohibitions<sup>ii</sup>**

- (a) No person shall knowingly sell or offer to sell at retail an ATV of 70cc or greater for use by a person under 12 years of age.
- (b) No person shall knowingly sell or offer to sell at retail an ATV of greater than 90cc for use by a person under 16 years of age.

### **Provides penalties for violations**

## Conclusions

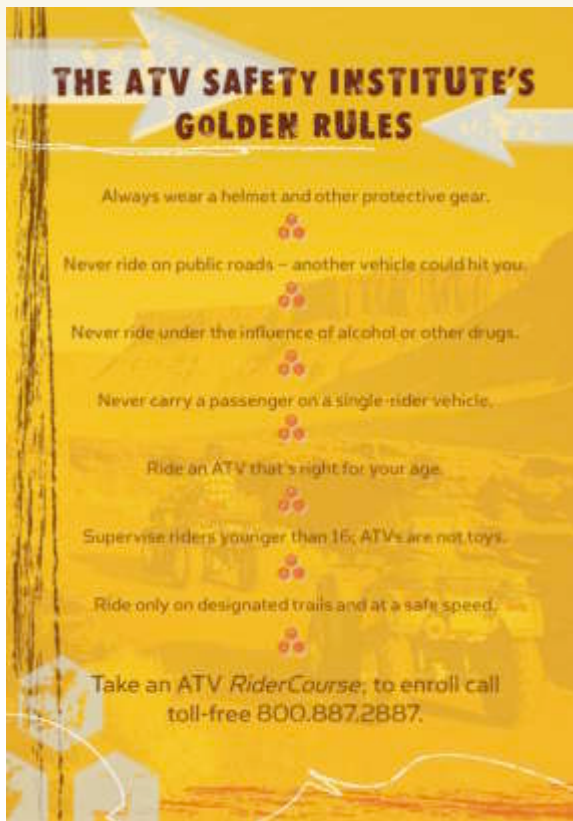
The CPSC's recently issued 2005 Annual Report of ATV Deaths and Injuries ("2005 Annual Report") shows that the estimated injuries per 10,000 ATVs declined for the fourth year in a row and is now at its lowest point since 1998. These declines have occurred even while the number of four wheel ATVs in use increased by 700,000 units between 2004 and 2005. The 4-wheel ATV injury rate declined 9 percent over the same time period.

The 2005 Annual Report also shows that the number of estimated all-terrain vehicle injuries involving children under 16 fell 10 percent between 2004 and 2005, and has fallen from 37 percent of all ATV-related injuries in 1998 to 30 percent in 2005. The risk of fatality per 10,000 ATVs has likewise declined from 1.4 per 10,000 in use in 1999 to 1.1 per 10,000 in use in 2004.

Since 1998, the number of ATVs in use has more than doubled. Yet, for the eight year time period since the CPSC's new injury sample and methodology has been in place, there has been no appreciable upward trend in injury risk and, as noted, the injury risk has declined since 2001 and is now at its lowest point since 1998. When the rising population of ATVs in use is taken into account, there has been no appreciable upward trend in either injury or fatality risk since 1998 and 1999, respectively.

With that said, while the ATV injury trend is improving, the industry believes that even one injury is one too many. The ATV industry is committed to the safety of its customers and will continue to work with the CPSC, user groups, retail dealerships, and all others interested in promoting ATV safety through model state legislation, rider training and education, parental supervision, and rider responsibility.

The vast majority of ATV-related accidents and fatalities involve behaviors that the ATV industry warns against in its rider education programs, in all its literature, and on vehicle labels. In fact an analysis of a random sample of CPSC in-depth investigations (IDIs) of ATV fatalities in the U.S. during 1997-2002 showed that 92 percent of the fatalities were associated with one or more "warned against behaviors."



### **Warned Against Behaviors**

- Not wearing a helmet
- Carrying at least one passenger on single rider ATVs.
- Riding on a public road
- Alcohol and other drug use
- Operating at an excessive speed
- Youth riding adult-sized ATVs

### **Specialty Vehicle Institute of America**

Since 1983, the Specialty Vehicle Institute of America® (SVIA) has promoted the safe and responsible use of All-Terrain Vehicles (ATVs) through rider training programs, public awareness campaigns, and state legislation. The SVIA also serves as a resource for ATV research, statistics, and vehicle standards. The SVIA, based in Irvine, California, is a not-for-profit trade association sponsored by Arctic Cat, BRP, Bush Hog, Honda, John Deere, Kawasaki, KYMCO, Polaris, Suzuki, Tomberlin and Yamaha. For membership information, call 949.727.3727; for safety information or to enroll in the ATV RiderCourse<sup>SM</sup> nearest you, visit [www.atvsafety.org](http://www.atvsafety.org) and click on "Online Enrollment," or call 800.887.2887.

## Endnotes

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<sup>i</sup> The following language neither is currently part of SVIA's Model State ATV Legislation, nor is it language that SVIA is currently advocating since the proposed update to the ANSI/SVIA voluntary standard, on which the language is based, has not yet been finalized. The current age/cc restrictions in the Model, however, likely will be outdated in the future, requiring any law enacted with the current age/size provisions to be amended. For this reason, we also offer the following alternative language for future consideration:

(a) No person under age 6 may operate an ATV.

(b) When operating on public land, a person under age 10 shall only operate a Y-6 Model ATV, a person age 10 to 11 shall only operate a Y-6 or Y-10 Model ATV, a person age 12 to 13 shall only operate a Y-6, Y-10 or Y-12 Model ATV, and a person age 14 to 16 shall only operate a Category Y or a Category T ATV, as those terms are defined in the most current American National Standard for Four Wheel All-Terrain Vehicles.

<sup>ii</sup> The following language neither is currently part of SVIA's Model State ATV Legislation, nor is it language that SVIA is currently advocating since the proposed update to the ANSI/SVIA voluntary standard, on which the language is based, has not yet been finalized. The current ATV retailer prohibitions in the Model, however, likely will be outdated in the future, requiring any law enacted with the current retailer provisions to be amended. For this reason, we also offer the following alternative language for future consideration:

(a) No person shall knowingly sell or offer to sell at retail an ATV other than a Y-6 Model ATV for use by a person under 10 years of age.

(b) No person shall knowingly sell or offer to sell at retail an ATV other than a Y-6 or Y-10 Model ATV for use by a person under 12 years of age.

(c) No person shall knowingly sell or offer to sell at retail an ATV other than a Y-6, Y-10, or Y-12 Model ATV for use by a person under 14 years of age.

(d) No person shall knowingly sell or offer to sell at retail an ATV other than a Category Y or Category T ATV, for use by a person under 16 years of age.

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