

ATV SAFETY

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January 1, 1995. A 22-year-old male seismic surveyor died from the injuries he received when the All-Terrain Vehicle (ATV) he was operating over-turned, pinning him underneath the vehicle. The victim was alone, attempting to drive the vehicle through a wash-out and a steep embankment in a remote area inside an Indian reservation. He had apparently attempted to turn the vehicle at a sharp angle to cross a gully, placing the vehicle in a severe side-lean. The vehicle overturned, pinning him underneath, face down. Blood analysis determined significant levels of both amphetamine and cannabinoid, and a bag of suspected controlled substance was found on the body. *Source: Wyoming FACE 95WY004.*

All-terrain vehicles (ATVs) became popular in the 1980s as an off-road recreation and sporting vehicle. According to the Consumer Product Safety Commission (CPSC), today there are more than 5.6 million ATVs in use. ATVs are still used primarily for hunting and other off-road sports but have become popular on farms and ranches. Although the number of 3-wheel ATV injuries has decreased in recent years as a result of manufacturers discontinuing their production, the number of 4-wheel ATV injuries and deaths has steadily increased.

A study conducted by CPSC investigated the injuries, exposures, and risk estimates for ATVs from 1997 to 2001 (see Table 1). The number of injuries from ATVs more than doubled, while the number of ATVs increased nearly 40 percent.

Subsequently, the risk of ATV injury increased to 20 injuries per 1000 ATVs or 46.4 percent. In this same period, the number of ATV drivers increased 35 percent and the number of driving hours grew more than 50 percent. Approximately one-third of ATV injuries in 2001 were victims less than 16 years of age.

Table 1. U.S. ATV Injury, Exposure, and Risk Estimates.

	Year		% Increase
	1997	2001	
Injuries	54,700	111,700	104.2
Exposure Measures			
Drivers (Million)	12.0	16.3	35.5
Riders (Million)	18.1	22.9	26.4
Driving Hours (Million)	1,575	2,364	50.1
Riding Hours (Million)	1,801	2,608	44.8
ATVs (Million)	4.0	5.6	39.5
Risk Measures			
Injuries/Thousand Drivers	4.5	6.8	50.7
Injuries/Thousand Riders	3.0	4.9	61.6
Injuries/Million Driving Hours	34.7	47.3	36.1
Injuries/Million Riding Hours	30.4	42.8	41.0
Injuries/Thousand ATVs	13.7	20.0	46.4

Source: All-Terrain Vehicle 2001 Injury and Exposure Studies. Consumer Product Safety Commission. January 2003.

CAUSES OF ATV INJURIES AND FATALITIES

As is the case with tractor injuries, ATV injuries are rarely caused by design flaws. Most ATV injuries occur because of operator error or misuse, or because the operator does not wear personal protective equipment, such as helmets and goggles. Additional factors that contribute to ATV injuries include:

- Driving under the influence of alcohol or drugs (impairing judgment, balance, and hazard detection)
- Operating the ATV at excessive speeds (loss of control and hazard detection)
- Inadequate operator experience (children operating large-size ATVs)
- Carrying passengers (limiting control, upsetting weight balance, and restricting vision)
- Improper use of ATVs (horseplay or reckless driving)
- Collisions with other vehicles (on public and private roads)
- Result of malicious intent (such as stringing wires across ATV paths with the intent to cause injury to the operator)

TEXAS ATV LAWS

Chapter 663 of the Texas Transportation Code defines an all-terrain vehicle as a motor vehicle equipped with a saddle for the use of the rider and a passenger if the motor vehicle is designed by the manufacturer to transport a passenger. It is designed to propel itself with three of four tires in contact with the ground, and manufactured for off-highway uses other than farming and lawn care.

Restrictions are placed on any person who operates an ATV on property owned or leased by the state or a political subdivision of the state, including public parks, recreation areas, hunting lands, and public roadways. Laws cover the following topics:

- Certification requirements for all operators
- Special provisions for children under 14 years of age
- ATV equipment requirements
- Operator safety apparel
- Reckless or careless operation
- Carrying passengers
- Operation on public roadways

Certification Requirements – A person may not operate an ATV on public property unless he or she attends a state-approved ATV safety training course and holds a safety certificate, or unless he or she is

under the direct supervision of an adult who holds a safety certificate. The certificate must be carried anytime the ATV is operated on public property.

Operation by Person Younger than 14 – In order to operate an ATV on public property, a person younger than 14 years of age must complete a safety training course where demonstration of driving skill is required, and must be under the direct supervision of a parent or legal guardian.

Required Equipment – An ATV operating on public property must be equipped with a brake and muffler system in good working condition, and must contain a United States Forest Service qualified spark arrester. It must also display a lighted headlight and taillight at least thirty minutes after sunset, thirty minutes before sunrise, and at any time visibility is reduced to insufficient light.

Safety Apparel – An approved safety helmet and eye protection must be worn when operating an ATV on public property. Look for helmets with the label from the American National Standards Institute, Department of Transportation, or the Snell Memorial Foundation to verify that the helmet has been safety tested.

Reckless or Careless Operation – A person may not operate an ATV on public property in a careless or reckless manner that endangers, injures, or damages any person or property.

Carrying Passengers – A person may not carry a passenger on an ATV on public property unless the ATV is designed by the manufacturer to transport a passenger.

Operation on Public Roadway – A person may not operate an ATV on a public roadway except under certain conditions. For example, an ATV operator may cross a public roadway, other than an interstate highway or limited-access highway, if the operator crosses the roadway at an intersection after coming to a complete stop before crossing, yields the right-of-way to oncoming traffic, and has headlights and taillights illuminated.

In addition, as long as the public roadway is not an interstate or limited-access highway, an ATV operator may drive on a public roadway as long as:

- The operation is in connection with certain agricultural products

- The operator attaches an 8-foot-long pole and triangular orange flag to the back of the ATV
- The operator holds a driver's license
- The ATV's headlights and taillights are illuminated
- The ATV operation occurs in the daytime
- The ATV operation does not exceed 25 miles from the point of origin

ATV RIDER CERTIFICATION TRAINING

State-approved ATV rider certification courses are available to all purchasers of ATVs and required for all ATV operators before driving on public lands. Courses generally cover such topics as starting and stopping, turning, negotiating hills, emergency stopping and swerving, and riding over obstacles. The course also covers protective gear, environmental concerns, and local laws.

To find out about a safety course in your area, call the ATV Safety Institute at (800) 887-2887, or check with your local dealers who may sponsor safety courses.

SAFETY TIPS

Riding ATVs can be safe and enjoyable if the operator is properly trained and practices good judgment to avoid unnecessary risks. Following are a few safety guidelines:

- Children should not be allowed to operate ATVs without specialized training. Ask your local ATV dealer about rider safety courses in your area.
- Children should be permitted to only operate an ATV that is of appropriate size.

Minimum Age	ATV Engine Size (cubic centimeter, cc)
6 years and older	Under 70cc
12 years and older	70 – 90cc
16 years and older	Over 90cc

- Don't operate ATVs while under the influence of alcoholic beverages or drugs that may impair judgment and reaction time.
- Never operate an ATV at excessive speeds. Ensure speed is right for the terrain, visibility conditions, and your experience.

- Always scan the path ahead and identify potential hazards such as rocks, stumps, low or fallen branches, fences, guy wires, and rough or unstable path surfaces.
- Always supervise young operators.
- Always tell someone where you are going and when you will return.
- Wear appropriate riding gear including an approved helmet, goggles, gloves, over-the-ankle boots, long-sleeve shirt, and long pants.
- Read owner's manual carefully.
- Never carry extra riders.
- Be careful when driving with added ATV attachments. These affect the stability, braking, and operation of the ATV.
- Never operate the ATV on streets, highways, or paved roads, except to cross at safe, designated intersections.
- Always make sure the ATV is in good operating condition. Check tires and wheels, braking, and steering.
- Always stop and check the entrance to lands where you want to ride. Look for chains, rope, or wire that may span the entryway. These barriers can be difficult to see.
- Pay attention to where you are driving. Trespassing can include entering a posted area; an area noting crop for harvest; a fenced area; or remaining after being asked to leave.



ADDITIONAL ATV RESOURCES

- For training, contact the ATV Safety Institute at 1-800-887-2887. For a youth readiness checklist and age recommendations, contact the ATV Safety Hotline at 1-800-852-5344.
- For more ATV product information and safety statistics, call the Consumer Product Safety Commission at 1-800-638-2772.

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