

# ATV Safety

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**January 1, 1995.** A 22-year-old seismic surveyor died from the injuries he received when the All-Terrain Vehicle (ATV) he was operating overturned, pinning him underneath the vehicle. The victim was alone, attempting to drive the vehicle through a wash-out and up 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. Blood analysis showed significant levels of both amphetamine and cannabinoid, and a bag of a suspected controlled substance was found on the body.

Source: Wyoming FACE 95WY004.

All-terrain vehicles (ATVs) became popular in the 1980s as off-road recreation and sporting vehicles. According to the Consumer Product Safety Commission (CPSC), there are more than 5.6 million ATVs in use today. ATVs are still used primarily for hunting and other off-road sports, but they also have become popular on farms and ranches. Manufacturers have stopped making 3-wheel ATVs because of the injuries associated with their use. However, the number of 4-wheel ATV injuries and deaths has steadily increased, as shown in the following table. The number of injuries from ATVs more than doubled from 1997 to 2001, while the number of ATVs increased nearly 40 percent. The risk of ATV injury increased to 20 injuries per 1,000 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 the people injured in 2001 were less than 16 years of age.

## ATV injury, exposure and risk estimates.

	Year		% Increase
	1997	2001	
<b>Injuries</b>	54,700	111,700	104.2
<b>Exposure measures</b>			
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
<b>Risk measures</b>			
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 Injuries and Fatalities

ATV accidents 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 a helmet and goggles.

Other reasons for 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 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)
- Malicious intent (such as stringing wires across ATV paths with the intent of injuring 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 rider and one for a passenger if the motor vehicle is designed to carry a passenger. An ATV is designed to propel itself with three of four wheels in contact with the ground, and manufactured for off-highway uses other than farming and lawn care.

There are restrictions on ATV operators who drive 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. Some of those laws are summarized below.

**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 any time the ATV is operated on public property.

**Operation by children.** To operate an ATV on public property, a person younger than 14 must complete a safety training course in which the demonstration of driving skills is required, and must be supervised by a parent or legal guardian.

**Required equipment.** An ATV operated on public property must have a brake and muffler system in good working order and must contain a U. S. Forest Service-qualified spark arrester. The headlights and taillights must be illuminated at least 30 minutes after sunset and 30 minutes before sunrise, as well as any time visibility is reduced.

**Safety apparel.** Drivers must wear approved safety helmets and eye protection when operating ATVs on public property. Look for a helmet 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 a 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 crossing is made at an intersection after coming to a complete stop, if the operator yields the right-of-way to oncoming traffic, and if the ATV's headlights and taillights are on.

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

- 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 has a driver's license.
- The ATV's headlights and taillights are illuminated.
- The ATV operation occurs in daylight.
- The ATV is not driven more than 25 miles from the point of origin.

## Rider Certification Training

A driver must attend a state-approved ATV rider certification course 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

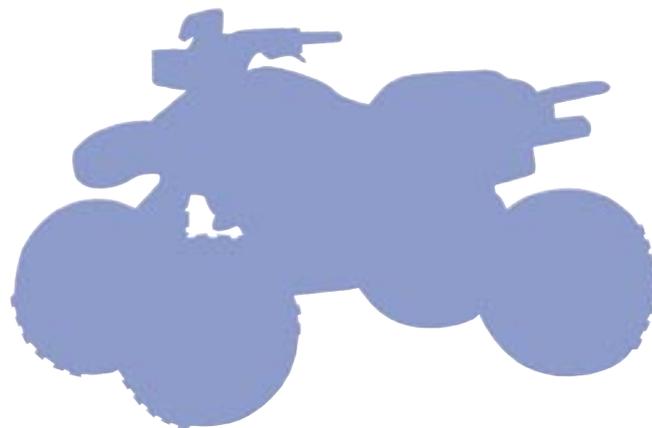
Riding ATVs can be safe and enjoyable if the operator is properly trained and practices good judgment to avoid unnecessary risks. Always follow these safety guidelines:

- Don't let children operate ATVs without specialized training. Ask your ATV dealer about rider safety courses in your area.
- Don't let children operate ATVs of an inappropriate size.

Minimum age	ATV engine size (cubic centimeter, cc)
6 years and older	Under 70 cc
12 years and older	70-90 cc
16 years and older	Over 90 cc

- Don't operate ATVs while under the influence of alcohol or drugs that may impair judgment or reaction time.
- Never operate an ATV at excessive speeds. Make sure the 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 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 the 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 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 hard to see.
- Pay attention to where you are driving. You are trespassing if you enter a posted area, an area with a crop for harvest, or a fenced area. If a landowner asks you to leave, do so immediately.



## 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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