

SAFE FARM

Promoting Agricultural Health and Safety



ATV safety for farm work, recreation

Farm operators may purchase all-terrain vehicles (ATVs) to haul livestock feed or get to the field, but ATVs often serve another purpose: recreation. Since the risk of injury involving youth operation of these popular vehicles is high without proper training and experience, it's important that all family members know and follow necessary precautions every time ATVs are used.

According to the U.S. Consumer Product Safety Commission, four out of every 10 people treated each year in emergency rooms for ATV injuries are under the age of 16. During a single year, the Iowa Department of Public Health reported at least 50 injuries (including one fatality and nine hospitalizations) from farm-related ATV incidences. Not included are many injuries unrelated to agriculture.

This publication briefly discusses major safety concerns related to ATVs, including the need for protective gear, a pre-ride inspection, and proper operation. Parents also should determine each family member's readiness to operate an ATV based on physical size, coordination, balance, ability to judge distances, willingness to follow rules, and peripheral vision.

Manufacturers' guidelines suggest that no one under the age of 16 should operate an ATV with an engine larger than 90CC. They also recommend an engine between 70 and 90CC for youth age 12-15, and an engine 70CC or smaller for children age 6-11. Although a child may be old enough to ride a certain sized ATV, not all youth have the strength, skills, or maturity needed to operate it safely. See the back page for how to get more information on how to decide if a child is able to operate an ATV.

All ATVs used on public property and land purchased with off-highway vehicle registration fees must be registered with the Department of Natural Resources. There is a farm-use exemption and if the ATVs are only used on private land it would not need to be registered. Riders ages 12-17 are required to have a valid education certificate on their person when operating. Riders younger than age 12 must be under direct parental or adult supervision.

Wear the right gear

Head protection: A helmet is the most important piece of safety gear for an ATV operator. If designed for ATV use, a helmet can prevent serious head injuries. Helmets used for bicycling, skateboarding, and rollerblading should not be used on ATVs because they lack face protection and the ability to absorb energy on impact. Look for helmets with a label from the American National Standards Institute, Department of Transportation, or the Snell Memorial Foundation to verify the helmet has been safety tested. The helmet also must be able to resist a blow from a sharp object, stay in place, and provide a minimum amount of peripheral (side) vision. Correct size is essential, everyone should have a helmet properly sized.

Eye protection: A face shield may be part of the helmet. If not, wear an ANSI-approved pair of goggles or glasses with hard-coated polycarbonate lenses. This will protect your eyes from rocks, twigs, branches, flying dirt, insects, or water that can cause you to lose control or damage your eyes.

Body protection: Gloves protect hands from scrapes and scratches, improve grip on the controls, and reduce soreness from the pressure of holding onto the handle bars. Boots protect feet from trail

All-terrain vehicle safety

How much do you know?

1. What does the O letter in the START-GO acronym mean?
2. Tire pressure may cause ATVs to handle improperly. True or false?
3. How many passengers, at most, are ATVs designed to carry?
 - a) none
 - b) one
 - c) two
 - d) three
4. What is the most important piece of safety gear needed for riding an ATV?
 - a) chest protection
 - b) boots
 - c) helmet
 - d) gloves
5. ATVs used for recreation in Iowa by residents must be registered. True or false?

See answers on back.

debris and keep feet properly placed on the footrest, which is important in maintaining balance and control of the ATV. A sturdy, long-sleeved shirt or jacket and long pants to protect arms and legs from cuts or scrapes caused by trail debris and branches is also recommended.

Proper clothing also protects the operator from problems caused by weather conditions, including sunburn and frostbite. Optional gear includes a padded jersey, chest plate, knee pads, elbow pads, and shin guards.

Make a pre-ride check

- Tires and wheels – Make sure air pressure in tires is as recommended and check for cuts or gouges. Check them with a low-pressure tire gage. Tighten axle nuts and secure by a cotter pin.
- Controls and cables – Check locations and make sure all work. Throttle should move smoothly when handlebar is in different positions. Brakes should be properly adjusted and foot shift firmly fastened.
- Lights and electrical system – Ignition switch should stop engine when in “off” position and headlights and taillights should work when in “on” position.
- Oil and fuel – Check oil and fuel levels.
- Chain or driveshaft chasis – Inspect, adjust, and lubricate chain or drive-shaft chasis. Check for nuts and bolts loosened by vibration.

START-GO

This refers to steps to use every time you start the ATV:

- Steering and drive systems
- Tires and suspension
- Activate ignition and lights
- Registration
- Throttle and brakes
- Gasoline and oil
- Operate responsibly

Know how to operate

ATVs handle differently from other vehicles, such as motorcycles and cars. Therefore, it's important to know how to turn, go up and down hills, select safe routes, avoid obstacles, swerve, brake, and know what to do if something goes wrong. Operators also need good judgment in maintaining a safe distances when

following other ATVs, following laws, knowing when to turn around due to weather, fuel needs, mechanical problems, or darkness.

Always scan the environment ahead and identify visible hazards, such as rocks or stumps, low or fallen branches, fences, guy wires, and rough or unstable trail surfaces. Some hazards may be hidden or appear unexpectedly, such as other riders or wildlife. Fixed obstacles, such as railroad tracks, driveways, or waterways also can be hazardous if the operator does not anticipate them.

Operating an ATV safely also requires skill and practice. The ATV operator must know the proper speed, where and how much weight to shift while making turns and riding up and down hills, and braking.

The operator also must be willing to follow rules. Never allow passengers on the ATV, or allow anyone to operate it who has not had proper training or may be under the influence of alcohol or drugs. ATVs are designed for one person only – the operator. An extra person will interfere with normal operation of the vehicle. The added weight also will complicate handling of the ATV up and down slopes, around curves, and stopping distances. Operators also must know and be willing to follow local and state laws that apply to ATVs.

All-terrain vehicles can be both practical and fun for farm families but they also pose risks. Reduce the dangers, and the number and severity of injuries, by following good safety practices whenever an ATV is used.

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For more information

Other ISU Extension and Outreach publications may help you develop guidelines for working with animals, or address other related issues. Go to <https://store.extension.iastate.edu>.

For a summary of Iowa snowmobile and ATV regulations, contact the Iowa Department of Natural Resources at www.iowadnr.gov or 515-725-8200. For training, contact the ATV Safety Institute at 1-800-887-2887.

For other information, call the Consumer Product Safety Commission at 1-800-638-2772.

All-terrain vehicle safety

What can you do?

- Become trained in how to use and handle an ATV.
- Always wear an approved helmet when riding an ATV. A strip of reflective tape on back of helmet gives extra visibility at night.
- Inspect the helmet for wear; replace after every accident or every two to four years.
- Know and follow laws that apply to ATV operation.
- Use caution on unfamiliar roads and avoid excessive speeds.
- Ask permission before riding on private property and leave the area clean.
- Never allow passengers, unless the ATV is specifically designed for a passenger.
- Never ride alone. Leave a plan with someone responsible and follow your plan.
- Before you take off on an ATV, be sure you are familiar with how it handles.
- Wear all suggested personal protective equipment when you ride.

Answers to quiz:

1-Operator responsibility; 2-True; 3-a; 4-c; 5-True.

SAFE FARM

Safe Farm is an Iowa State University Extension and Outreach project helping to make Iowa farms a safer place to work and live.

For more safety information, check the web at www.abe.iastate.edu.