

ATV Safety Fact Sheet/Study Guide for 4-H Achievement Day
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Rider Age and Engine Size

6 yrs and older – under 70 ccs

12 yrs and older – 70-90 ccs

16 yrs and older – over 90 ccs

It is important to always wear proper **protective gear** when operating an ATV. This includes an **approved helmet with adequate eye protection, sturdy over-the-ankle-boots, gloves, long-sleeved shirt or jacket, and long pants.**

SIPDE is a decision making process that helps you manage risks and enjoy a safe, comfortable ride. Each letter of SIPDE represents an action for the rider:

- S** = scan/search terrain and environment
- I** = identify hazards or specific problems in you path
- P** = predict what may happen and think of the consequences
- D** = decide what to do based on riding abilities and capabilities of your ATV
- E** = execute your decision

The **single most important piece of protective gear you can wear is a helmet**. A good helmet can help prevent serious head injuries. Studies have shown that wearing a helmet *does not reduce essential vision or hearing*. Operating without an approved motorcycle helmet increases your chances of severe head injury in the event of an accident.

While color, design, and price may influence your decision about which helmet to buy, **protection** should be your first consideration.

Read and study the owner's manual carefully, and look at your ATV to memorize the location of the controls.

To mount your ATV correctly:

1. Set the parking break
2. Grasp the handlebar with your hand
3. Place your foot on the footrest—when mounting from the left, do not step on the shift lever
4. Lean over, grasp the handlebar with your other hand
5. Swing you leg over the seat and place your foot on the other footrest
6. Seat yourself in a comfortable position
7. Keep your feet on the footrests at all times even when the engine is not running.

To dismount your ATV correctly:

1. Set the parking break
2. Stop the engine using the engine stop switch
3. Turn off the ignition, fuel valve and vent cap (if present)
4. Follow the steps for mounting in reverse order

A pre-ride inspection of your ATV's mechanical condition is important to minimize the chance of injury or being stranded, as well as to ensure the long-term enjoyment of your ATV

An easy way to remember what to check before riding is the acronym **TCLOC**:

T=Tires and Wheels –

1. Air Pressure: Always retain the recommended tire pressure. If the tire pressure on one side is higher than the other side, the vehicle may pull to one side.
2. Condition: Check for cuts or gouges that can cause air leakage.
3. To avoid loss of control or injury, make sure axle nuts and wheel nuts are tightened and secured by cotter pins.

C=Controls and Cables–

1. Controls: check the location of all the controls by sitting on the ATV. Make sure they work properly.
2. Throttle and other cables: Make sure the throttle moves smoothly and snaps closed with the handlebars in any position. An off-road environment is hard on cables.
3. Breaks: do the controls operate smoothly and are the controls adjusted according to the owner's manual? Are they positioned for easy reach? Your breaks are a crucial part of riding and must always be in tip-top condition.
4. Foot shifter: is it firmly attached and positioned for safe operation?

L=Lights and Electrics–

1. Ignition switch: Check the condition of the switch and make sure it works properly by switching it off during your warm-up period.
2. Engine stop switch: Does it turn off the engine?
3. Headlight and taillight: Are they working? You could be caught out after dark.

O=Oil and Fuel–

1. Do not get stranded b/c you are out of oil and fuel. Know your ATV's cruising range.
2. Check oil level with dipstick or sight glass while the engine is off. Check your Owner's manual for procedure.
3. Always start your ride with a full fuel tank.
4. Check for fuel or oil leaks.
5. Take off the air filter cover and check the condition of the filter element.

**C =Chain and Drive–
Shaft Chassis**

1. Chain: Inspect, adjust and lubricate the chain regularly. Your chain is a vital link from the engine to the wheels. Check for chain slack or free play so that it is within specifications as described in your owner's manual.
2. Drive shaft: if your ATV's equipped with a drive shaft rather than a drive chain, check for oil leaks. Maintain its oil supply as outlined in your owner's manual.
3. Nut n' bolts: Riding a rough terrain will loosen parts. Look and feel for loose parts while the engine is off. Shake handlebars, footrests, etc., before each ride and periodically check fasteners.

Read the owner's manual section on starting you ATV and use the starting procedure represented in the letters **BONE-C**.

Starting Procedures:

- Breaks** – Set the parking break.
- On** – Turn fuel cap vent to ON position. Also turn fuel valve to ON or RESERVE position, depending on how much fuel is in the machine. Turn ignition key on, if equipped.
- Neutral** – Check that the transmission is in NEUTRAL. To make sure it is in neutral, check the NEUTRAL indicator, if equipped. If necessary, release the parking brake, rock the machine back and forth keeping your feet on the footrests, then reapply the parking brake.
- Engine** – Check that the engine stop switch is in the RUN or START position. The engine stop switch is usually found by either the left or right hand grip.
- Choke** – If the engine is cold, put the CHOKE in the ON position. Check your owner's manual for choke location
- Start the engine according to the directions in your owner's manual.
- Once the machine is warmed up, return the choke to its normal position. This is very important because if you do not the machine will not run properly.

Be sure riders under the age of 16 are under adult supervision while riding.

Posture

The correct riding posture will help you to easily operate the controls body weight. Proper straight-line riding posture includes:

- Head and eyes up, looking well ahead
- Shoulders relaxed, back straight
- Elbows bent, slightly out away from your body
- Hands on the handlebars
- Knees in toward the tank
- Feet on the footrests, toes pointing straight ahead

Always keep both hands on the handlebars and both feet on the footrests of your ATV during your ATV operation.

Shifting Gears

Because there are several types of ATV transmissions, you must be certain you know how to shift the transmission of the ATV you are riding.

- Always release the throttle while shifting to prevent the front wheels from lifting.
- Learn the sounds of your engine so you know when to shift to keep the engine speed in the most efficient range.

Braking

Look ahead when braking, not at the ground immediately ahead of you. Following these tips will help you make smooth, controlled stops.

- Release the throttle.
- Shift to a lower gear to use the engine to slow the vehicle.
- Apply both brakes equally (if equipped).
- Avoid excessive braking while cornering. Do most of your braking before the turn.
- Apply both brakes lightly on slippery surfaces.
- Keep head and eyes up.
- Keep your feet on the footrests at all times.

Parking

When parking your vehicle always try to find flat ground.

- Shift into neutral.
- Stop the engine with the engine stop switch and, if equipped, turn off the ignition switch.
- Set the parking brake, or shift into a low gear if you do not have a parking brake, to keep the ATV from rolling.
- Turn the fuel off.

Turning Basics

At low speeds:

- Move your body weight forward and to the inside of the turn.
- Turn your handlebars while looking in the direction of the turn.

At higher speeds:

- The method of turning at a higher speed is similar to turning at a low speed. The difference is that as speed increases, you must lean farther toward the inside of the turn.

Stopping Quickly

Because nature is constantly changing, you must be prepared to stop quickly, slow down or swerve to avoid obstacles, such as fallen trees or washouts across your trail. An animal may dart out in front of you, or you may meet another rider as you round the bend. Never ride faster than your visibility allows.

A quick stop could be necessary at any time so remember:

- Ride within your ability
- Use both brakes when stopping
- Slow your ATV when cresting a hill or going through a turn
- Never ride past your limit of visibility
- Shift weight properly if stopping in a turn
- If you accidentally lock the wheels, release the brakes momentarily and reapply the brakes more gradually
- Keep your feet on the footrests

Swerving

You should be able to make emergency swerves to avoid unexpected hazards when riding. Follow these guidelines to help prevent mishaps:

- Keep your feet on the footrest
- Look in the direction of the swerve
- Shift weight to the inside of the turn
- DO NOT brake while swerving – brake AFTER swerving and only after the ATV is traveling in a straight line

Reading the Terrain

Reading the terrain means to observe and understand the features and characteristics of the land on which you are riding.

Learn to read the trail as you ride. A wise rider watches well ahead on the trail. Know what is coming; be ready to react long before you get there. Be constantly alert for hazards and changing terrain conditions.

Adjust your speed to trail conditions and visibility. A responsible rider stays out of trouble not simply by handling the machine well, but by riding safely and avoiding risky situations in the first place.

Choosing Proper Speeds

By scanning far enough down the trail, you will be able to pick the best “lines” (or safest path of travel) around or over hazards or small obstacles.

As you approach a hazard, do not fixate on it, but rather continue to search for other clues in the environment and adjust speed well in advance.

Crossing Roads and Highways

ATVs are designed to be used OFF-ROAD ONLY. But on occasion you may find it necessary to cross a road or highway. A leading cause of accidents and fatalities among ATV riders is from riding on or crossing the road illegally or improperly. If you must cross a road, use the following guidelines:

- Bring your ATV to a complete stop on the shoulder of the road.
- Yield the right of way to all oncoming traffic. Look both ways.
- Cross the road at a 90 degree angle where there are no obstacles and your visibility is good.
- Always assume that drivers DO NOT SEE YOU, since most drivers look for cars, not ATVs.

Alcohol

Drinking and riding can be fatal. Consumer Product Safety Commission studies show that 30% of all ATV riders killed in ATV accidents had been drinking. 14% of all reported accidents with injuries indicated alcohol consumption by the operator. As you can see, ALCOHOL AND ATVs DO NOT MIX.

Small quantities of alcohol impair your ability to:

- Ride and scan the trail for multiple hazards.
- Perceive moving objects.
- React quickly and properly.
- Coordinate eye, hand, and foot movements.
- Maintain balance while maneuvering.
- Make good decisions.

- See clearly at night.
- Stay within capabilities.

Obstacles

Keep in mind the following tips when crossing obstacles:

- Approach obstacle as close to 90 degrees as possible, while standing on the footrests.
- Adjust approach speed prior to the obstacle without losing momentum.
- Hold handgrips firmly, with knees and elbows slightly bent and body weight slightly back.

Going Up a Hill

The key to being a good hill rider is to keep your weight uphill at all times.

When approaching an uphill climb you should:

- Keep your feet firmly on the footrests.
- Shift the ATV into a lower gear and speed up BEFORE climbing the hill so you can maintain momentum.
- When approaching the uphill climb, move way up on the seat and lean forward, or stand and position your torso over the front wheels.
- As you are climbing, you may need to shift to a lower gear to prevent lugging the engine or stalling. To shift into a lower gear on a hill, remember:
 - o Keep your body weight forward as you prepare to shift gears. For steeper hills, lean forward as much as possible.
 - o Shift quickly while momentarily releasing the throttle; this will help keep the front wheels from lifting.

Getting to the Bottom

When going downhill:

- Shift your weight to the rear (uphill).
- Keep your speed low.
- Use gradual braking.
- Use a lower gear.
- Look ahead.

Traversing

When you go across a slope rather than directly up or down, it is called traversing. Here are some basic guidelines for traversing:

- Keep both feet firmly on the footrests.
- Lean your upper body uphill.
- When riding on soft terrain, you may need to gently turn your front wheels uphill to keep your ATV on a straight line across the hill.
- If your ATV begins to tip, turn the front wheels downhill if the terrain allows. If the terrain does not permit, dismount on the uphill side immediately.
- Avoid making sudden throttle changes.