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**UNIVERSITY**  
*of* VERMONT



# Utility Task Vehicle (UTV) Operator Training

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Created for CALS/RESNR farms by Risk Management & Safety  
Created from a .ppt from Kent McGuire, OSU Ag Safety and Health

# ATV vs UTV: What's the difference?

## All Terrain Vehicle (ATV)



An **ATV** (all-terrain vehicle) is known as “quad” or “four wheeler” It is meant for [single-riders](#).

## Utility Task Vehicle (UTV)



A **UTV** (utility task vehicle) tends to allow for “side-by-side” riding. It is sometimes called a “side by side” or “SXS” for short.

# ATV/UTV Differences

## ATVs

ATVs are for **single riders** and have a **handlebar lever** to steer and brake.

Tire pressure recommendations are between 4 and 8 pounds per square inch (psi).

Made to maneuver more easily through tight areas in the woods.

## UTVs

Operate similar to a car/truck with a **steering wheel**, accelerator foot pedal and a brake foot pedal.

Have a bench seat with seat belts for **more than one rider**.

Tire pressure recommendations are between 12 and 18 psi.

Have hauling capability with a cargo box.

Have towing capacity using a hitch.

# Vermont Legislation

## Vermont state law about operating **off-road vehicles** may be found here:

[state law about operating ATVs/UTVs: https://legislature.vermont.gov/statutes/fullchapter/23/031](https://legislature.vermont.gov/statutes/fullchapter/23/031)

- Off-road vehicles must be registered with the state of Vermont per 23 VSA § 3502 *if operated outside UVM-owned property*, such as on public roads.
- Operators of **registered** off-road vehicles need to be certified to drive UVM vehicles per UVM Driving Training Program. *UTVs that stay on farm property are considered farm equipment not a “vehicle” under UVM insurance.*

UVM Driver Safety Training information can be found [here](#).



## UVM Requirements for Training and Documentation

- Supervisors are responsible for ensuring UTV Operator Training is completed by all users.
- Operator training must be completed prior to use.
- Refresher training must be completed annually OR if the user causes property damage or injury while operating a UTV.
- Following these .ppt slides, you will be directed to complete an **online Utility Vehicle Quiz**. Quiz results are recorded and serve as proof of knowledge and of training completion.
- You can *View your Safety Training Transcript* anytime in the Quick Links here: <https://www.uvm.edu/riskmanagement/train-and-inform-lab-personnel>

# Questions or Feedback

Questions or feedback regarding this or any training may be directed to:

- UVM Risk Management & Safety [safety@uvm.edu](mailto:safety@uvm.edu)
- Information may be found on the farm Safety website.

**MENU** **UVM RISK MANAGEMENT AND SAFETY**

## Farm Safety

The Department of Risk Management and Safety works in partnership with individuals and groups both on and off-campus to assess the risks of farm and field activities in order to ensure that work is performed using proper controls and best safety practices.

UVM's Miller Research and Education Complex (MREC), Horticulture Research and Education Center (HREC) and Morgan Horse Farm come with unique safety hazards unlike those in a typical indoor research lab environment. Additionally, Jericho Research Forest and Proctor Maple Research Center are other off campus facilities where both outdoor and indoor research is conducted.

# Equipment-specific Hands on Training

**Hands-on training** must also be provided to UTV operators.

Operators should review the **equipment manual** and understand the safe use *and limitations* of each specific UTV they will operate.

Hands-on training must be documented following [lab-specific training guidelines](#).

This training will cover the following:



- How to identify the characteristics and uses of a Utility Task Vehicle.
- Review general features and controls of an UTV.
- Discuss the importance of stability and load capacity of UTVs.
- How to recognize the hazards associated with operating a UTV.
- Provide an outline of safe operating procedures for UTVs.

# Eligibility to Operate

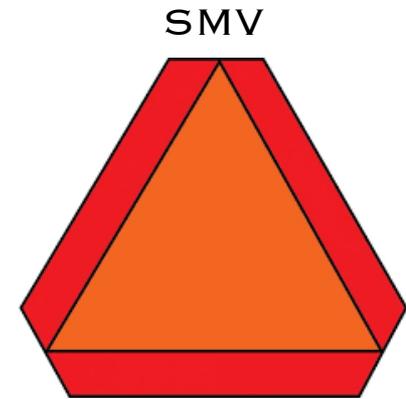
- Only UVM-Affiliates may operate an UTV once this online + an in-person training has been completed and documented.
- Complete this initial training before use and then take it again *annually* as a refresher.
- Farm equipment must be operated in a safe and responsible manner.



# Permissible Use of UTV

UTVs may only be operated only as follows:

- To transport people, equipment or supplies
- Within the boundaries of each designated UVM research facility or farm.
- Must have a Slow Moving Vehicle (SMV) emblem on back
- With utmost courtesy, care and consideration for the safety of pedestrians who must be given the right of way **at all times**.



# UTV Characteristics and Uses

- Are gasoline, diesel, or electric powered
- Can be 2-wheel, 4-wheel, all-wheel drive or tracked
- Operate similar to a car/truck with a steering wheel, accelerator foot pedal and a brake foot pedal
- Have a high / low range & reverse transmission
- UTVs have wheel like a car and a bench seat with seat belts and can have passengers.
- May use all-terrain tires.
- Has hauling capability with a cargo box.
- Has towing capability with a hitch.
- Has specific weight and towing restrictions. *Read the manual.*

# Utility Task Vehicle Features

Features and the location of features can vary on each UTV make or model.

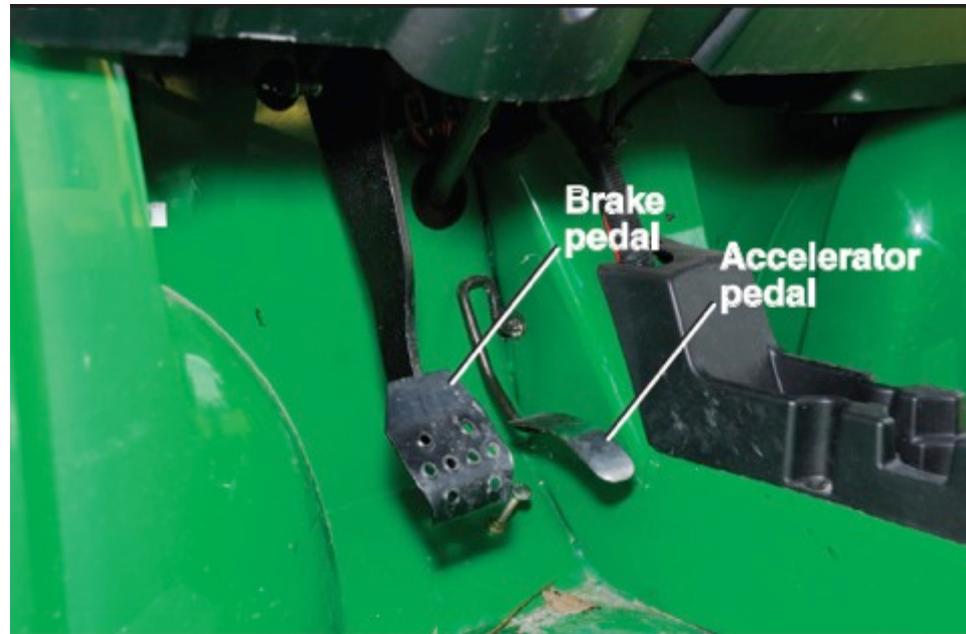
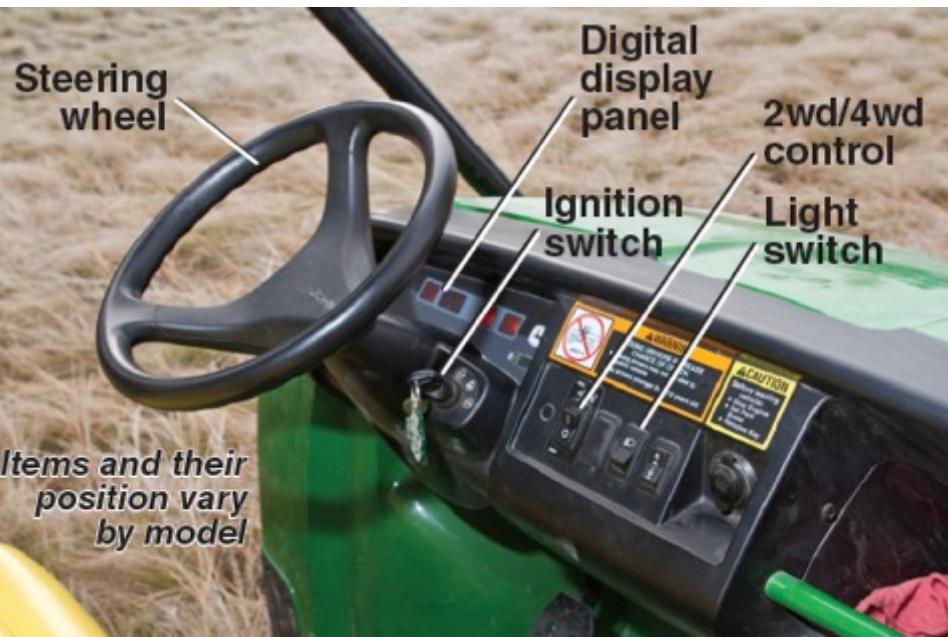


Supervisors are responsible for providing a **hands-on features review** of specific make/model UTV with staff prior to their operating.

\* ROPS = Rollover Protection Structure

# Safety Using UTV Controls

Controls can also vary on each UTV make or model.



Supervisors are responsible for providing a **hands-on controls review** of the specific make/model UTV with staff prior to their operating the UTV.

# Stability and Load Capacity

## UTV compared to a highway vehicle

- UTV has a smaller wheelbase.
- UTV has higher center of gravity.
- UTV's center of gravity is always shifting while it is in motion.
- UTV has low pressure off-highway tires.

All of these factors can contribute to a UTV being **less stable**. A UTV is **more prone to roll or flip** if driven too fast or steered abruptly.



**SLOW DOWN!**  
while driving a UTV



# Stability and Load Capacity

Drivers must never exceed the weight limits of their UTV. Check the manual for the following:

- Load weight limit
- Towing capacity
- Vehicle payload (payload capacity):  
This is the *total weight that* the UTV can carry. One must consider the maximum combined weight of all of the payload + the weight of the driver, gear and cargo, etc.



# Stability and Load Capacity

*Distribute the load evenly to have more control.*

If you will be hauling cargo, the center of gravity moves toward the rear axel, **increasing the risk of tip-over** in any direction. Never use hitch adapters that raise the ball higher than the axles.

Never tow a load that exceeds the maximum towing load as specified by owner's manual. Understand that wet, slippery or uneven surface conditions may further reduce towing capacity.

Never exceed the vehicle  
payload (weight of the towed  
load / trailer, driver + cargo)



# Maintain Control When Towing

- Travel at a speed slow enough to maintain control.
- Allow extra time and distance for safe stopping. The stopping distance must increase based on your speed of travel + the weight of your load being towed.
- The weight of the towed load can cause a loss of traction and a loss of control, especially on slopes.
- Tow only with an approved tow hitch.
- Use caution when turning under adverse surface conditions (*raining, snowing, or muddy*)



# Be Aware of Potential Hazards

- Operating on steep slopes, dangerous terrain
- Making fast turns, rapid acceleration and deceleration.
- Collision with another vehicle or object
- Pinch points, cut points, wrap points, and burns
- Fluids under high pressure or other stored energy
- A shifting cargo load
- Mounting or dismounting injury
- Injury to eyes from dust or insects while in motion
- Injury while securing or fastening down loads
- Driving or backing up through brush and branches, where the frame of the cab or roll bar can flex branches that snap back with force and can injure the driver or passengers.

# Ensure the following *before each use*:

- Seat belts are being worn.
- Rollover protection, if enabled, is secured in place.
- Test that the brakes are operating correctly *before each use*.
- Lights are working, especially if being operated during low light conditions between dusk to dawn.
- Slow moving vehicle (SMV) emblem is visible from the rear.



SMV



# UVM UTV Operator Requirements

**UTV operators are prohibited from the following while operating a UTV:**

- Talking on a cell phone or texting
- Use of radio/audio headsets or ear buds
- Use for personal business



## **Preventative maintenance**

- Ensure guards and safety devices are in good condition and properly installed
- Check all fluid levels
- Follow owners manual for maintenance schedule

# Conduct Pre-Operation Inspection Before Use

- Physically walk around and inspect UTV before operating.
- Record findings on a pre-inspection checklist.



## UTV Pre-Operation Inspection Checklist

*Complete this checklist prior to operating a UTV.*

UTV Make and Model \_\_\_\_\_ Date or Week starting: \_\_\_\_\_

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
<b>Inspection completed by &gt;&gt;&gt;</b>							
Tire air pressure							
Tire tread & sidewall condition							
Tires Seated Properly on Rims							
Wheel wells free of debris							
Coolant, Fluid leaks							
Exhaust pipe secure							
Oil level and condition							
Air filter							
Head lights Working							
Tail lights Working							
Fire extinguisher charged							
Shovel and/or traction pads							
Seat Belts and Buckles							
Fuel level							
Engine starts normally							
Brakes Working							

# Conduct Pre-operation Inspection Before Each Use

Ensure proper tire inflation  
& condition



Look for puddles  
or leaks



- Check fuel level
- Notice any strange odors or strange sounds or behavior
- Lighting: Check headlamps, tail lamps, brake lights and turn signals
- Brakes: Test that they work smoothly without noise or pulling
- Slow moving vehicle emblem is in place, clean and visible
- Check that equipment and supplies are adequately secured

# UTV Operator Requirements

- Excessive speed requires a greater stopping distance and increases risk of tip over on corners
- When operating on a roadway, maintain a safe distance behind other vehicles
- Move equipment on roadways at off-peak traffic hours when possible
- Stay alert for traffic and roadside obstacles
- Must have proper lighting and marking to assure visibility
- Make sure loads are properly secured



# Driving and traveling safety

- Never exceed the speed of a bicyclist or pedestrians when operating a UTV on a travel path or sidewalk.
- When parking or stopping the UTV, do not block sidewalks or travel paths.
- Give Pedestrians the right of way ALWAYS.
- Never jump a curb; this can damage the UTV and compromise vehicle control.
- If you must leave a UTV unattended, put it in PARK, turn ignition OFF, and apply the parking brake.
- Remove and secure the ignition key to prevent unauthorized use.



# Defensive Driving

## Defensive driving:

- Stop at all “blind intersections” or when approaching the corner of buildings and then proceed with caution.
- Yield the right of way to pedestrians.
- Establish eye-contact with other drivers before progressing. *Operators must **never** assume that a motor vehicle driver has given them the “right of way”.*
- Verify safety prior to all turns. Operators must look over the shoulder in the direction of travel prior to the turn to check for motor vehicles, pedestrians and bicyclists.

# Passenger Safety

UTV operators are responsible for the safety of their passengers

- Keep head, legs and arms within the cab
- Remain in the seats.
- Never exceed manufacturer's load limits. (Number of passengers or allowable UTC weight)
- Driver and passengers must wear seat belts.



# Off Road Operation

such as in farm fields or orchards

Operators must:

- Reduce speed according to the terrain and visibility conditions.
- Be alert to ground hazards, look ahead at the terrain.
- Watch carefully for holes, ruts, and other obstacles.
- Watch for uneven surfaces, drop offs and overhead clearance obstructions.
- Avoid slopes when possible. When traveling on slopes, go up and down and not sideways.



# Off Road Operation

## Riding through water

- Never cross a body of water where the depth is unknown.
- Never cross water with a swift current.  
*(Tires may float, making it difficult to maintain traction and control.)*
- Cross at a point where both banks have a gradual incline.
- Maintain a slow steady speed and avoid submerged obstacles.
- After leaving water, always dry the brakes by applying light pressure several times.

# Safe Use of UTV During Public Events

- Drive defensively.
- Always give pedestrians the right of way.
- Avoid driving in areas that are highly congested with pedestrians.
- Designate vehicle travel areas for the event and stay on them whenever possible during the event.
- If driving in a congested area is a must, use a spotter to assist with crowd control. (*Example: in an emergency situation*)



# Safe Use During Public Events

- Maintain a safe following distance from other UTVs, golf carts or pedestrians even at slow speeds.
- Use proper signals, including hand signals, to warn others when you are turning.
- Avoid parking on sidewalks or designated pedestrian travel areas.
- Communicate with other drivers and pedestrians by using eye contact, hand signals, radio communication, or other means.



# Summary

## Utility Vehicle Safety

- 1 Read the owner's manual and follow safety labels.
  - 2 All occupants must wear seat belts and keep legs and arms inside the vehicle at all times.
  - 3 Use the correct lighting, marking, and reflectors to warn other drivers when operating near roadways or equipment.
  - 4 Use the appropriate speed on rough terrain.
  - 5 Stopping distance increases with speed and weight of a towed load.
  - 6 Make sure cargo or material is properly secured during transport.
  - 7 When backing up, always check for obstacles or people behind the machine.
  - 8 Drive completely up or down a slope before making a turn.
  - 9 Be cautious of traffic when operating near or crossing roadways.
  - 10 Use care when approaching blind corners or areas that obscure vision.
  - 11 Stay clear of ditches and embankments.
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- The characteristics of a UTV differs from that of a car or truck.
- Features and controls of a UTV can vary.
- Supervisors must provide **hands-on training** to go over specific features and controls before initial use.
- Stability and load capacity of your specific UTV is critical information to understand.
- Always employ safe operating procedures including slowing down, drive defensively pedestrians always have right of way, and if towing supplies.
- Check the terrain carefully and avoid hazards when operating a UTV.

**Safe UTV operation requires attention to the machine, the surroundings, and others around you.**

# Link to Online Quiz & References

Congratulations!

You have completed one portion of this training.

Go to the **online training login** in the Quick Links:

<https://riskmgmt.w3.uvm.edu/courses>

and complete the **Utility Vehicle Quiz** in “Specific Hazards”.

## Resources

- National Safe Tractor and Machinery Operation Program, Hazardous Occupations Safety Training in Agriculture. Penn State University, Ohio State University, and National Safety Council
- OSHA 29CFR1910 and 29CFR1928
- Standards and Safe Operation of Utility Vehicles, University of Minnesota .ppt