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# **Utility Type Vehicle (UTV) Operator Training**

CFAES Safety & Health Coordinator – Kent McGuire, OSU Ag Safety and Health  
Content Review by K. Mann, OSU Ag Safety and Health



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# Utility Type Vehicle (UTV) Operator Training

## Training and Documentation

- Following this training, you will be given a short quiz.
- Provide printed documentation of completion of this online training to your supervisor.
- Supervisors must maintain documentation of the online training for each employee.
- Initial UTV Operator training must be done prior to all new employees operating a UTV. Refresher training must be taken if the employee causes property damage or injury while operating a UTV.



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# Utility Type Vehicle (UTV) Operator Training

## Questions about the material

For questions concerning the material contact:

- Kent McGuire – CFAES Health and Safety Coordinator  
at 614-292-0588 or [mcguire.225@osu.edu](mailto:mcguire.225@osu.edu)
- OSU Environmental Health & Safety at 292-1284



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# Learning Objectives

- Identify the characteristics and uses of a Utility Type Vehicle (UTV).
- Explain the features and controls of a UTV.
- Discuss the stability and load capacity of a UTV.
- Describe preventative maintenance and pre-operation checks.
- Recognize the hazards associated with operating a UTV.
- Outline safe operating procedures for a UTV.



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# Utility Type Vehicle Characteristics / Uses

- Compact, powerful, and versatile machines
- Commonly gasoline, diesel, or electric powered
- Can be 2-wheel, 4-wheel, all-wheel drive or tracked
- Operates similar to a car/truck with a steering wheel, accelerator foot pedal and a brake foot pedal
- High / low range & reverse transmission
- Side by side or bench seating with seat belts
- Usually all-terrain tires with 20 p.s.i. or less tire pressure
- Hauling capability with cargo box
- Towing capability with hitch
- Easy to operate but, the operator must be trained, know the machine's proper use, and it's limitations



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# UTV Features



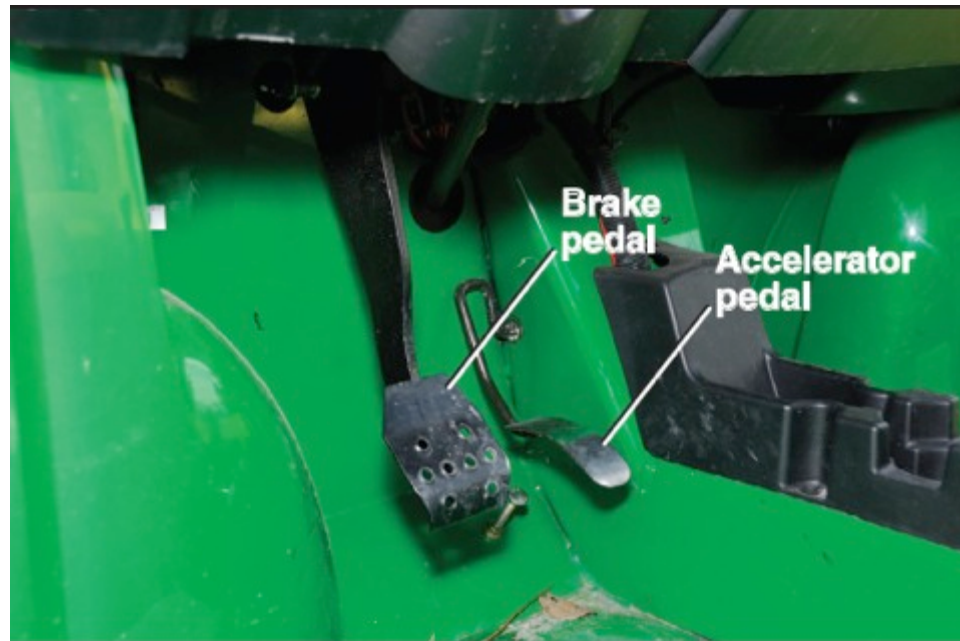
**Features and location can vary with UTV make or model.  
Supervisors should go through the features with staff prior to operating.**



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# UTV Controls



**Controls and location can vary with UTV make or model.  
Supervisors should go through the controls with staff prior to operating.**



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# 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 during operation.
- 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.







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# Stability and Load Capacity

## ***Load Capacity***

- Know the manufacturer's load weight limit and towing capacity. Do not exceed this limit.
- When hauling cargo, the center of gravity is raised and moves towards the rear axle, increasing the risk of tip-over in any direction.





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# Stability and Towing Capacity

## ***Towing Capacity***

- Do not tow a load that exceeds the maximum towing load as specified by owner's manual.
- Weight of towed load (trailer + cargo) must never exceed the vehicle payload.
- Travel at a speed slow enough to maintain control.
- Stopping distance increases with speed and weight of towed load.
  - *Allow extra time and distance to stop.*
- Excessive towed load can cause loss of traction and loss of control on slopes.
- Tow only with an approved hitch designed for towing.
- Use caution when turning under adverse surface conditions.
  - *Rain, snow, or mud*



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# UTV Attachment Operation

## Attachment installation and use

- Carefully read attachment manual and follow all instructions and warnings.
- Attachments can include snow plows, sprayer units, dry material spreaders, wenchers & roof racks.
- Attachments must be compatible with the machine.
- Verify that all connections are secure and attachment responds properly to controls.
- Attachment changes can effect:
  - Intended use of UTV
  - Weight or balance of the machine
  - Can alter machine
    - Controls
    - Performance
    - Reliability





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# Eligibility to Operate

## Requirements of Operators:

- University employees or “Authorized Drivers”
- Valid drivers license
- Obey all traffic regulations
- Completed training; update training every two years
- Operate vehicles in a safe and responsible manner





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# Potential UTV Hazards

There are several hazards associated with UTV operation.

- Rolling over on steep slopes, dangerous terrain, or fast turns
- Collision with another vehicle or object
- Pinch points, cut points, wrap points, and burns while working with the UTV
- Fluids under high pressure or other stored energy
- Injury to driver and passengers from shifting loads in cargo area
- Injury from falling from the UTV when mounting and dismounting
- Injury to the eyes from dust and insects while the UTV is in motion
- Injury to pedestrians from being struck by the UTV or from loads falling off of UTVs



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# Permissible use of a UTV

## Utility Type Vehicles may only be operated only as follows:

- To transport people, equipment or supplies
- When operated by an eligible UTV operator
- When equipped with the “Required Equipment”
- On public roadways within the boundaries of each Ohio State University campus or designated research farms (*written authorization must be obtained from the appropriate party for use of roads outside of the University’s jurisdiction*)
- On designated roadways only from sunrise to sunset at a speed of 25 mph or less with a Slow Moving Vehicle (SMV) emblem
- On walkways or sidewalks in such a manner that they do not impede or interfere with normal pedestrian traffic, to a maximum of 5 mph
- With the utmost courtesy, care and consideration for the safety of pedestrians who will be given the right of way **at all times.**



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# Required Equipment

## UTV must be equipped with the following:

- Operable brakes
- Proper working lighting when operated during low light conditions between dusk to dawn
- A slow moving vehicle (SMV) emblem visible from rear. (*on public roadways*)





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# University Employee: Operator Procedure & Performance

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

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

## **Preventative maintenance**

- Keep all guards and safety devices in good condition and properly installed
- Check all fluid levels
- Follow owners manual for maintenance schedule
- Conduct pre-operation inspection
  - Inspect machine carefully by walking around it before starting





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# University Employee: Operator Procedure & Performance

## **Pre Operation Inspection must include:**

- Check tires: proper inflation and condition
- Check fuel level
- Check for puddles, leaks, odors, strange sounds or behavior
- Check lighting: headlamps, tail lamps, brake lights and turn signals
- Check brakes: work smoothly without noise or pulling
- Check slow moving vehicle emblem: in place, clean, and visible
- Check that equipment and supplies are adequately secured





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# University Employee: Operator Procedure & Performance

## Driving safety: Public Roads

UTVs must be driven at a safe speed given the operating conditions

- 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





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# University Employee: Operator Procedure & Performance

## **Driving safety: traveling within the grounds**

- When operating on a travel path or sidewalk, do not exceed the speed of the bicyclists or pedestrians.
- When parking or stopping, do not block sidewalks or travel paths.
- When approaching pedestrians, use extreme caution and give pedestrians the right of way.
- Use curb cuts when navigating from roadways to sidewalks. Jumping curbs can cause damage to the UTV and compromise vehicle control.
- When leaving a UTV unattended, the vehicle must be taken out of gear, ignition must be turned off and parking brake applied. Remove and secure the vehicle ignition key from unauthorized use.





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# University Employee: Operator Procedure & Performance

## Defensive driving:

- Stop at all “blind intersections” and then proceed with caution.
- Yield to the right of way to pedestrians.
- Ensure other drivers have seen the UTV prior to progressing. *Operators must **not** assume that motor vehicle drivers give “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.
- Ensure use of seat belts if UTV is equipped.



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# University Employee: Operator Procedure & Performance

## Passenger Safety:

Operators are responsible for the safety of their passengers including:

- Keep head, legs and arms within the cab.
- Remain in seats.
- Do not exceed manufacturer's load limits.  
(Number of passengers or weight)
- Use of seat belts if provided.





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# University Employee: Operator Procedure & Performance

## Off Road Operation:

When UTVs are operated off of roadways, operators must:

- 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.
- Reduce speed according to the terrain and visibility conditions.
- Avoid slopes when possible. When traveling on slopes, go up and down and not sideways.





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# University Employee: Operator Procedure & Performance

## **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.



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# University Employee: Operator Procedure & Performance

## Using a UTV during public events

- Drive defensively and pedestrians have the right of way.
- Avoid driving in areas that are highly congested with pedestrians.
- Designated vehicle travel areas for the event. Whenever possible stay on them during the event.
- If driving in a congested area is a must, use a spotter to assist with crowd control. (*Example: Emergency Situation*)







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# University Employee: Operator Procedure & Performance

## Using a UTV 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 by using eye contact, hand signals, radio communication, or other means.





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# Summary

- There are a variety of uses for a Utility Type Vehicle (UTV).
- The characteristics of a UTV differ from that of a car or truck
- Features and controls of a UTV can vary. Supervisors must go over features and controls before initial use.
- Understand the stability and load capacity of the specific UTV being operated.
- Follow safe operating procedures including on-campus driving, defensive driving, and motor vehicle laws when on the road.
- Recognize and avoid hazards when operating a UTV.

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



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# Utility Type Vehicle (UTV) Operator Training

## References

- 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
- Safe Operation of Utility Type Vehicles (UTVs) Fact Sheet, Ohio State University
- Standards and Safe Operation of Utility Vehicles, University of Minnesota
- Utility – Terrain Vehicle Operator Training Course, U.S. Department of Agriculture
- John Deere Gator Utility Vehicle TS and TH6x4 Operator Manual, John Deere, 2004





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- Visit OSU Ag Safety and Health at [www.agsafety.osu.edu](http://www.agsafety.osu.edu)

## **Remember!**

- After taking the quiz, provide printed documentation of completion for this online training, to your supervisor.
- Supervisors must maintain documentation of both the online training and practical evaluation for each employee.



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# Utility Type Vehicle (UTV) Operator Training

You have completed the Utility Type Vehicle (UTV) Operator Training, click below to begin the progression quiz.