

Precautionary advice for ATV handling on roadways

By Mandy Archer

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Although state policies may allow roadway use of ATVs, manufacturers do not recommend use on public roadways.

Photo courtesy Central States Center for Agricultural Safety and Health

As of July 1, 2022, all-terrain vehicles and utility task vehicles, collectively known as Off-Road Vehicles, are legally allowed to be driven on unpaved county roads and many paved public roads under certain conditions in the state of Iowa.

Previously, ordinances allowing for ORVs defaulted to county-by-county jurisdiction. As of 2021, 72 of Iowa's 99 counties had passed ordinances allowing ORVs on public roadways.

However, a recent study has shown the ORV crash rate increased by 58% in Iowa counties with an ordinance allowing ORVs on roadways.

If you operate an ORV on roadways, be aware that your risk of a crash is much higher than off road.

Overall, ATV crashes result in about 700 deaths and 130,000 emergency room visits per year in the United States. Out of all ATV-related fatalities, about 60% occur on public roadways, and two-thirds of those fatalities are from single-vehicle crashes. This indicates that even when there are no other vehicles around, you are still at risk while operating an ORV on the road.

Over half (56%) of fatal single-vehicle crashes on roadways were a result of a rollover. In other cases, operators ended up losing control, going into the ditch, and hitting trees, poles, or other objects.

The name "all-terrain vehicle" is incorrect when describing ATVs or other ORVs. According to the Specialty Vehicle Institute of America, "ATVs are designed, manufactured and sold for off-road use only."

An ORV is not designed to be driven on paved or unpaved public roadways due to their off-road tires with knobby tread and low pressure, their high center of gravity and narrow track, and, for many vehicles, their lack of rear differential. The tires of these vehicles are specifically designed to grab off-road terrain for traction, and they have difficulty having proper interaction with roadway surfaces. Roadway tires are designed to continually grip and release roadways, but an unbalanced traction



Photo courtesy Central States Center for Agricultural Safety

of off-road vehicle tires with public roads may lead to loss of control and subsequent rollover or collision.

Riders must keep in mind that most ATVs have a solid rear axle or a locked rear differential and thus require a wider turning radius. This is another feature designed for off-road use that complicates driving on the road. In roadway vehicles, the outside tires travel faster than the inside tires due to a rear differential which allows the vehicles to turn sharply. This is not true for most ATVs. Operators can easily misjudge the speed they need to slow down to in order to properly negotiate a turn or curve and result in loss of control and crash.

Many UTVs have a feature to unlock the rear differential, and that should be done when traveling on public roads.

Other factors that contribute to crashes and injuries on an off-road vehicle include alcohol use, passengers on ATVs, and not wearing a helmet.

Alcohol use is an extremely common risk factor in adult ORV crashes and is involved in about half of adult rider deaths.

ATVs are usually designed for use without passengers. Iowa youth that reported driving on roads and riding with passengers were three times more likely to have been in a crash.

In all cases, a head injury is the most frequent cause of death in ATV riders, and wearing a helmet decreases the likelihood of a head injury by 50-80% if in a crash.

Travel on public roads with ATVs and UTVs only when there are no other options. If you must use a public roadway, increasing your visibility to other motor traffic is crucial. Consider purchasing ORVs that are brightly colored such as orange or yellow to make your vehicle stand out on the road, rather than a vehicle that is green or camouflage.

For recreation, the best thing to do is use private land for which you have permission or stick to ATV parks and designated ATV trails. Follow all safety precautions before going on an off-road vehicle and recognize the serious consequences of improper ORV use on you, your family and your community.

Wear your helmet, buckle up on UTVs, and set a good example for your personal safety and the safety of others.

Mandy Archer is the outreach specialist for the Great Plains Center for Agricultural Health at the University of Iowa College of Public Health. To continue the conversation on ATVs, check out the FarmSafe podcast from the Great Plains Center for Agricultural Health at bit.ly/3Vwv3EU. This article references work from Dr. Charles Jennissen, who authored “American Academy of Pediatrics Recommendations for the Prevention of Pediatric ATV-Related Deaths and Injuries” and the technical report “A Comprehensive Report on All-Terrain Vehicles and Youth: Continuing Challenges for Injury Prevention.”

