

Episode Title: ATVs on the Farm

Summary: In this episode, we focus on ATV use on the farm and Dr. Charles Jennissen talks about some of the common injuries from ATV farm incidents and which activities might increase the risk of injury. “ATVs and side by sides were the most common source of injury and death in agriculture across youth, for those kids 17 years and younger, and was the second most common source of injury and death in agriculture for all ages.”

Expert: Charles Jennissen

Episode Quote:

“And because a lot of times people are spraying by themselves. Maybe in areas even that are kind of far out. If that rolls over the person there's may not be anybody that will see that. And now it's on top of them. And they'll die of this traumatic asphyxiation.”

– Dr. Charles Jennissen, Pediatrician and Emergency Medicine Physician at the University of Iowa Hospitals and Clinics

Transcript

00:03 K. Crawford

Welcome to the FarmSafe Podcast brought to you by the Great Plains Center for Agricultural Health. In the blink of an eye, an injury can change your life and your farm forever. During each episode, workers in agriculture and public health share first-hand stories and real-life tips for making safer and healthier decisions while on the farm.

00:24 K. Crawford

Today we continue our conversation with Dr. Chuck Jennissen on ATV safety. Dr. Jennissen grew up on a dairy farm in Minnesota and has been around ATVs for most of his life. As a pediatrician and emergency medicine physician at the University of Iowa Hospitals and Clinics, he treats people in the emergency room—some who have been injured on ATVs. He is also involved in injury prevention projects like the ATV Task Force and STARS program, which stands for Safety Tips for ATV Riders. The focus today is ATV use on the farm. Dr. Jennissen talks about some of the common injuries from ATV farm incidents and what activities might increase the risk of injury. First, we hear about two ATV incidents on the farm that were shared with us.

Speaker 1

I was almost paralyzed from rolling downhill after checking on our cattle.

Speaker 2

My husband rolled his quad and was in the ICU for a week. If it wasn't for the hair line fracture letting pressure off his brain, he wouldn't be here. This topic is a big deal.

01:31 C. Jennissen:

In the United States, there's a lot of injuries that occur on farms in fact, the National Farm Medicine Center, did a study on the data from the ag injury news.org site that they keep. Basically, they're collecting all kind of reports in the media of ag injuries—injuries that occur on farms—and they found that ATVs and side by sides were the most common source of injury and death in agriculture across youth, for those kids 17 years younger, and was the second most common source of injury and death in agriculture for all ages.

These are a common problem on the farm and certainly have become a greater percentage of the injuries and deaths that we have seen over the past 30-40 years.

03:40 C. Jennissen

Related to ATVs, I did a study looking at the deaths that we had here in Iowa. And a lot of them have to do with carrying loads. That of course increases the center of gravity, and the height of the center of gravity and makes a tip-over more likely. One of the problems that we were really surprised about is that a lot of them occurred during spraying. Having a sprayer or a tank on the ATV particularly increases the center of gravity, even if you have a baffle, that liquid as it shifts like, on a slope is going to shift the weight, the center of gravity to the downside of that slope and a rollover is much more likely to happen.

And because a lot of times people are spraying by themselves. Maybe in areas even that are kind of far out. If that rolls over the person there's may not be anybody that will see that. And now it's on top of them. And they'll die of this traumatic asphyxiation.

And so, we saw that, that was a big proportion of the deaths, and so certainly people should be aware of this risk, and consider, you know, the terrain that they're spraying on so that they don't become a victim of this kind of situation.

05:13 C. Jennissen

Also, the weight that one can put on an ATV is often a lot smaller than you might think. On most farms and ranches, you have a utility ATV that has racks on the front and back, and the amount of weight that you can put on those is often a lot less than you think. In fact, for like a 250-cc 400-cc Polaris Trail Blazer, you can only have about 30 pounds—or the maximum that they may say you should have on it—it's 30 pounds on the front rack and 60 pounds on the rear rack. And that's not a lot of weight.

And so, for a bigger ATV like the Polaris Sportsman 800-cc. They actually say you can have a maximum weight of like 1200 pounds on the ATV, which is a lot of weight but the, the maximum for the front rack is 100 pounds, and the maximum for the rear rack 200 pounds. So that's 300 pounds— that allows for a 900-pound person to be on the ATV!

So, a lot of times that we might kind of have too much weight on the racks and that puts you at risk and again if that rolls over and on top of you, nobody's around, and you may die from traumatic asphyxiation or a lot of the injuries can occur from significant internal organ injury from this massive vehicle and unless somebody can get you to somewhere to get trauma care, you may not survive those injuries.

I also look like at the injuries that we've had that were occupational related here at the University of Iowa. And one of the striking things I found was that a good percentage of where people were herding cattle.

And I thought that's interesting, but it makes a lot of sense you know if you're doing activities where you're distracted from the terrain, paying attention to other things. So, you're paying attention to the cattle, to where you may not be checking the terrain as well as you should, and maybe there's a washout or something happens all sudden you're rolling the vehicle or going into a ditch, or something that you didn't quite realize where you're at.

And so that kind of makes sense when you think about it, and certainly, those are activities, when people are doing something, they should be thinking about having a helmet on.

06:53 C. Jennissen

We talked about traumatic asphyxiation as a big cause but really the major cause of death on ATVs, is a head injury and having a helmet on can really prevent or at least decrease the likelihood of those injuries. We have a number of studies, show you can decrease the likelihood of a head injury by 80%.

And so, they really are an effective way to do that. Now when people are doing farm work, we know that they don't like wearing helmets, a lot of times, and maybe it was some activities, maybe that's okay, I mean maybe they can get by without us serious head injury.

But if you're, you know, doing things where there's increased risk like herding cattle, you know that's you know that we know that's a risk or you actually decide you have to travel on the road with an ATV. Wearing a helmet, you know, can maybe decrease the likelihood that you would die in a crash or in a rollover. So certain activities you want to be even safer than you know and wearing a helmet is a critical aspect of doing that.

07:44 K. Crawford

I asked about the things we should consider when selecting a helmet for use on an ATV and here's what he had to say.

07:06 C. Jennissen

Because the speeds they can go, normally it's recommended to have a motorcycle like helmet on when you're on an ATV. But when you're doing work around the home like especially herding cattle maybe that's more than you would really need because a lot of times when you're doing occupational work, you're traveling 30 miles per hour or less— probably a lot less most of the time. And so perhaps you can get by with a helmet that doesn't have to absorb quite the speeds of a, you know, highway for you know 55-60 miles an hour.

So, there are other helmets that are available. One of them is a quad safe helmet available from Australia, these helmets are designed to take the speed that you would normally be doing work at, but they don't have some of the disadvantages of a motorcycle helmet. You can hear, it's lightweight, it doesn't have foam that can absorb rain so it can be set out in all kinds of inclement weather and still, not get destroyed.

And so, it's, it's something that people really should be thinking about. If you don't feel like they want to wear a motorcycle helmet, think about getting one at some, some other type of helmet that might be still do the same job that you that could absorb the forces you might have with what while we're doing work.

7:44 K. Crawford

I asked Dr. Jennissen about the type of injuries he sees and if he has recommendations for wearing any kind of protective gear besides helmets.

10:35 C. Jennissen

Probably the most common injuries that people get on ATVs are skin abrasions and injury lacerations from falling and so forth. And so being able to protect yourself if you do have a rollover, that's maybe it's not quite as severe, is to make certain to have a long sleeve shirt and long pants, boots, those kinds of things that protect other parts of your body are really important, obviously the helmet, and protecting your brain is, is the key thing. But, you know, I don't like getting a big abrasion on my elbow or something.

So, you can protect yourself by wearing other protective gear, and certainly if people are doing more high speed type things, you know, there's chest protectors and other types of gear that's often recommended when you're doing those type of activities but while you're doing farm work you don't necessarily have to have that kind of gear.

10:42 K. Crawford

Dr. Jennissen went on to highlight issues about ATV safety, like insurance and liability issues, and training for employees, that may be especially relevant to farm owners and operators.

10:35 C. Jennissen

I think as farmers and ranchers, people should really think about, how they're allowing ATVs and side by sides to be used on their farms.

One of the things is to make certain to look at your insurance and liability issues about when you're covered. Sometimes once you leave your property, and your road, you may not be covered. And so it's really important to find out from your insurance company, whether you really are covered for the things that you might be using an off-road vehicle for especially when you go off onto a roadway.

So, this is really important because literally you could potentially lose your farm in such a situation if you're not adequately covered.

Also, for employees you have on your farm, just having them jump on an ATV and do work if they haven't been trained, or if you are not enforcing them to use that vehicle safely—in other words, with a helmet, not with passengers on the ATV. If you're not following some of those safety rules that could make you really vulnerable—if something happens to them. And certainly, you want to train them how to operate these vehicles and making certain they can do so safely. Since kids aren't supposed to be on an adult size vehicle, if you have an employee who is actually kind of younger, and you need them to be on a vehicle and something happens, that

I think puts you fairly vulnerable to not only something bad, to somebody, you might care about but also just economically, it could be devastating.

I think it's really important that we want as farmers to have safe practices, and we want to do things safely. But related to ATVs, we sometimes fall way short of what is really considered safe. And so, you know, this is like we said earlier, this is one of the major causes of injuries and deaths right now on farms.

We need to step up as farmers and say, "you know we are going to operate more safely here with these vehicles, we're going to change the culture that we've had related to working with them." That starts with ourselves, and how we operate them, and showing a good example for our employees, and our children.

10:42 K. Crawford

If you're interested in learning more about ATV safety, check out the resources Dr. Jennissen has provided which can be found in the episode resources section on our website. These include an Agricultural ATV Use Fact Sheet and links to ATV Safety sites. In our next episode in the series, we talk about ATV safety features with Jenna Gibbs and Carolyn Sheridan from the Ag Health and Safety Alliance.

10:35 C. Jennissen

Join us on the farm safe podcast to learn more about keeping you and your family safe on the farm.

10:43 K. Crawford

We want to hear from you. Share your stories about health and safety issues on the farm, about injuries that made you change the way you work, or about the ways you keep yourself and others safe on your farm. Also let us know if there are any topics that you want to hear about on the air. You can visit our website at gpcah.org or email us.

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Episode Resources

- [UI Agricultural ATV Fact Sheet](#)
- [National 4-H ATV Safety Leader's Guide](#)
- [ATV Safety Institute](#)

Photo

