

**Episode Title:** Pilot Spotlight: Safety Conversations between Farm Parents and Youth

**Topic:** Youth Safety on the Farm

**Summary:** Former *FarmSafe* host, Anna Proctor, PhD, is back to discuss her pilot project with the Great Plains Center. Her study looks at conversations between parent-child dyads to determine how safety behaviors are passed on through modeling, training, and supervision. Do the parents and their adolescents share safety practices and beliefs? And how will these conversations lead to a better understanding of youth safety on the farm?

**Expert:** Anna Proctor, PhD

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**Episode Quote:**

*“What I found is that the youth prompted their parents quite a bit and they were going to their parents really as a resource. They sought reassurance from their parents with their answers.”*

– Anna Proctor

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## Transcript

### 00:10 E Ritchie

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, we share first-hand stories and real-life tips for making safer and healthier decisions while on the farm.

### E Ritchie

Farm families often assume that children “just know” farm dangers, which can result in normalizing risky behaviors and passing them down. Yet statistics actually show that most child farm fatalities involve children who live on the farm, not just visitors who are unfamiliar with farm hazards.

The Fair Labor Standards Act of 1938 intentionally gave lighter rules for agriculture—especially family farms—and these exemptions largely remain. A push in 2011 to update child-labor rules (due to tragic grain entrapment incidents involving teens) included proposals to limit on-farm tasks for kids—even on parent-run farms—but met resistance and were withdrawn in 2012. Instead, safety advocacy shifted toward voluntary guidelines, like agricultural youth work standards, playgrounds, supervision, and tractors with rollover protection.

Anna Proctor, a recent PhD graduate in Occupational and Environmental Health, conducted research on farm safety involving youth. Her dissertation focused on family farmers in southeastern Iowa with youth who also participate in farm labor. Anna successfully applied to receive funds from the Great Plains Center pilot grant program to fund her research idea, with her 2024 grant application titled “Conversations about Safety: Protecting Young Farm Workers.”

### E Ritchie

Some of you might recognize Anna, who was a co-host of Season 2 of the *FarmSafe* Podcast. Now she gets to be on the other side of the microphone!

Anna, what motivated your research project that examined safety cultures in family farms?

### 02:23 A Proctor

I worked with family farmers in southeastern Iowa, that was my target population. And I was working with parent farmers that had an adolescent in the house that also was working alongside the farm. So, a dyad, that duo. So, we know that there are about 2 million

farms in the United States and 95% of them are family-owned and-operated. And we also know that there's a lot of hazards in agriculture, you know, that's nothing new. Most farmers acknowledge that there is a risk with farming, it's a very hazardous occupation.

#### 02:58 A Proctor

There's a lot of physical and environmental risks like machinery, UV radiation, livestock, repetitive movements. Then there's also some psychosocial hazards like the social isolation. A lot of farmers are self-employed. There can be family tensions working with your families and family businesses. And with that, a lot of work-life imbalance. But there's also a lot of benefits to youth growing up and being raised in this environment. There's a lot of unique developmental opportunities. A lot of farming is manual labor. So, there's opportunities for physical strength development. And there's also a lot of opportunities for youth learning more practical life skills.

#### 03:38 A Proctor

There's ways for youth to apply scientific learning about topics that they've learned in schools, like life cycles and weather patterns, to their family's business. And it can really instill a strong work ethic. But something that I think is really important to talk about when thinking about youth working on family farms is one, there isn't a set age when youth begin farm work.

#### 04:00 A Proctor

And two, under the Fair Labor Standards Act, children of any age can work on farms that are owned or operated by their parents. So, there's not enforced, and with that, there's not enforceable child labor laws or safety regulations. And then there's also some other factors, one of them being developmental. Youth are not adults, and a lot of farm equipment and farm machinery is designed for adult capabilities and dimensions. Physical development for youth usually completes in the late teens and early twenties. Youth are also not cognitively fully developed and that doesn't usually complete until about the mid-twenties. So about 25, maybe 26.

And so, there isn't necessarily a way to make sure that children on the farm are doing tasks that are appropriate to their developmental level and capabilities. And that's important when thinking about youth farm injuries and fatalities. 33 youth are injured daily in an agriculture related incident. And then every three days, one youth dies. And half of all fatal injuries to youth occur in the agriculture industry alone. That was put out by NIOSH in 2019. And injury rates are estimated because there isn't a central repository. So, it's likely that these are under counts. We know that this is an issue and it's been an ongoing issue for quite some time.

#### E Ritchie

There are clearly many youth being injured on the farm, and in this country, very little "regulation" in place to protect farm youth on their family farm. I guess that leaves the parent as the main safety "enforcer" on the family farm. This is a unique "workplace dynamic" to investigate.

#### A Proctor

There's this interesting working dynamic between a parent and a child on a family farm, because the parent often doubles as a supervisor and the youth doubles as the employee. For my project, I was really interested in looking at this working relationship between parents and youth on family farms. I was curious to see the similarities or differences in safety perceptions between the parents and the youth as they discussed a farm safety scenario.

The project that I'm really talking about was investigating the use of a farm safety vignette with parents and their adolescents on family farms. I gave this vignette to my participants, and I used 15 parent-and-youth pairs. And the eligibility criteria for my study were they needed to live 115 area miles in Johnson County in Iowa. They needed to engage in farm work at least once a day and live on the farm that they worked on. And for youth, they needed to be between the ages of 13 and 19, and they also needed to be living with a participating parent.

And a vignette is a short story about a hypothetical character in a set of circumstances that can be used to gather perspectives and examine decision-making processes. And a vignette may elicit a more honest answer out of participants, because they're not talking about what they themselves would do, but rather what this fictional character would do. So, it's almost this layer of anonymity to their answers.

**[FarmSafe Music]****E Ritchie**

Can you read through the vignette that you used in your study to start the conversation that probed both parent and farm youth about safety actions?

**7:31 A Proctor**

Alex is a 13-year-old who lives on a farm in Spencer, Iowa. Alex works on the farm and is about to bale hay alone for the first time. The field Alex needs to bale will take about five hours to complete. Alex grew up watching the family members bale hay and has been trained on how to operate the baler by Dad. When leaving the house this morning, Alex was reminded to be careful and not to rush but to finish the job by that afternoon.

The baler is old and noisy, and Alex doesn't have hearing protection. The tractor doesn't have a cab or umbrella. It's a hot and windy day and there are dark clouds forming. The weather forecast is calling for heavy rain in a few hours. After working for about three hours, Alex notices that the hay is beginning to bunch up in the intake chamber. It's hot out, and Alex is in a bad mood, feeling hot, dirty, tired, and has a headache. Alex also feels pressure to finish the job before the rain.

To unclog the baler, Alex needs to get off the tractor and do something about the hay buildup. Alex remembers being told to shut off the tractor to clear a plug but also remembers dad and neighbors clearing the plug with the tractor still running. In fact, one time when the baler was shut off to clear a plug, there was trouble getting it restarted. What should Alex do?

**[FarmSafe Music]****8:46 A Proctor**

So, I gave the participants the vignette, and I gave them about 10 minutes to read it, talk about it, and come up with the answer. And I was interested in their thoughts on what they thought Alex would do, but I was actually more interested in how they were interacting with each other. So, was one prompting the other? Was there agreement? Was there disagreement? Was one influencing the other? And then solving the vignette allowed me to observe their interactions. I found five main themes with the vignette.

The first one is the solutions. So, what Alex should do. And there was a lot of agreement here between the parents and the youth. All participants believed that Alex should at least turn off the tractor, but about half recommended that Alex should turn off the PTO as well as the tractor just for an extra layer of protection. The next theme I found was the dyads believed that Alex's parents really lacked accountability.

They thought that Alex's dad should not have assigned them the job. They thought 13 was just too young to be doing a job like this, especially by themselves, especially when they didn't have updated equipment, and they were exposed to the elements and they had poor weather coming in. There was a lot of factors really working against them.

**10:05 A Proctor**

They also thought that Alex's dad should have been checking in on them, again, because this was the first time that they were doing this task solo. The next theme was dyad safety conversation. So, this is really looking at the interactions. What I found is that the youth prompted their parents quite a bit and they were going to their parents really as a resource. They sought reassurance from their parents with their answers. They wanted to make sure that they were on the same page as their parent and that they were thinking the same thing. And I found that the parents responded in a really positive way. They were really encouraging their child for asking questions and they would take the time to explain why they would do this or why they would do something different. And they often provided a lot of words of affirmation for the child speaking up, which I thought was a really positive finding.

**10:54 A Proctor**

The next theme I found is that a lot of the dyads related their own lives with the vignette, so they compared their own safety rules and protocols to the ones that were mentioned or not mentioned in the vignette. So, for instance, the tractor that Alex was on didn't have a cab, didn't have an umbrella, there was no hearing protection. So, a lot of participants took notice of that and explained how if they were on their farm, that wouldn't have been allowed. There would have been an updated tractor. There would have been hearing protection. There would have been things of that nature.

#### **11:26 A Proctor**

This final theme is that the dyads really did prioritize safety. Both the parents and the youth were very clear that they thought Alex should put their own safety first and they should disregard their job and that Alex's life is more important than bailing the field or bailing the field within a certain timeframe. They also believe that Alex's father should have been supervising him, and that Alex should not have had time limits, again, because of their age, but also because it was the first time that they were doing a job like this.

#### **11:57 A Proctor**

Something I did notice is that while the dyads, the parents and the youth, really did agree on what Alex should do, turn off the tractor and potentially turn off the PTO, there was a lot of disagreement on what Alex would actually do. A lot of the parents thought that Alex would do the behavior that they saw modeled by their dad and their neighbor who left the tractor on while unclogging the baler. But the youth thought that Alex would do what they had been told by their father, which was to pause, to not do anything, and to turn the tractor off. And so that was an interesting disagreement.

#### **[FarmSafe Music]**

#### **E Ritchie**

So, after watching 15 parent-child interactions with these vignettes, what take-home messages did you come away with in your observational study?

#### **12:44 A Proctor**

The parents are doing a lot of the right things. They are talking to their children about farm safety and the children definitely have an understanding of farm safety. One thing that I recommend based off of these findings is that farm parents adopt the teach back method, which is where they model a behavior that they're teaching their child. And then they explain how to do the task that they want their child to do. And then they watch the child do it on their own, but they're supervising. So, they're making sure that the child is doing it correctly. And if there are ways that it could be improved, they're able to get feedback right away. And they're also right there if the child has any questions. And this is actually a recommended strategy for teaching youth how to farm safely.

#### **13:31 A Proctor**

Altogether, I think my research showed that the family farmers in Southeastern Iowa that I interviewed, they really do value safety. I did notice that they did not perceive youth farm injuries as likely to happen to them or their child. They talk about youth farm injuries, it was usually, "oh, that'll happen to my neighbor or that'll happen down the road." But they didn't necessarily believe that it was likely to happen to them.

#### **13:57 A Proctor**

I also found that the youth were likely to ask questions and they were likely to raise safety concerns to their parents, which was an interesting finding because youth on family farms, that relationship between supervisor and employee can become convoluted because it's also tied within a family dynamic.

#### **14:13 A Proctor**

I found that supervision of the youth doing farm work, especially for new farm tasks, that was pretty rare. And so that's why I think the teach back method could be really effective to bridging that gap. And I did find that the farmers in my sample were really confident in

their safety rules, which is great. And all the farmers in my sample did have some kind of safety protocols in place. They're definitely on the right track. There's a lot of good that they're doing, and you can tell that they take it very seriously, but I do think that there's always just areas for improvement, especially, now we're in the summer, so we have, we had the spring, the busy planting season, and we're coming up on the fall, so we're gonna have the harvest season. So, just good things to remember going into those more demanding times for farmers.

### E Ritchie

Listen in on the *FarmSafe* podcast to join in on the conversation about keeping safe on the farm.

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's questions you have or topics that you want to hear about on the air. You can visit our website, [gpcah.org](http://gpcah.org), or email us.

Original music for the *FarmSafe* podcast was written and performed by Ben Schmidt.

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## Episode Resources

- [Ag Youth Work Guidelines](#)
- Anna's [Vignette](#)

## Photo

