

# Centered on Safety

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## SUMMARY KEYWORDS

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## SPEAKERS

Ashley Morin, Ricky Telg, Phillip Stokes

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Ricky Telg 00:04

This is Science by the Slice, a podcast from the University of Florida's Institute of Food and Agricultural Sciences Center for Public Issues Education. In this podcast, experts discuss the science of issues affecting our daily lives, reveal the motivations behind the decisions people make, and ultimately provide insight to solutions for our lives.



Phillip Stokes 00:31

Welcome to Science by the Slice. I'm Phillip Stokes, Education Coordinator with the PIE Center and one of the hosts of this podcast. This is the first episode of a series we're doing on agricultural health and safety. Over the next few weeks, you'll hear conversations with individuals in the fields of public health, nonprofit work, health research, education, and communication, who are all working through different means to improve health and safety within the agriculture, forestry, and fishing sector. And before we get into today's conversation, I'm going to share a few numbers with you. Three, two, and one. Three: According to the US Department of Agriculture, food is the third highest household expenditure behind housing and transportation. Two: The percentage of Americans who are directly involved in on farm forestry or fishing employment. This was also taken from USDA. One: According to the US Bureau of Labor Statistics, the agriculture, forestry, and fishing industry sector taken collectively has the number one or highest rate for fatal occupational injuries. And that last statistic is just referring to fatalities. Non-life threatening injuries and illnesses within agriculture, forestry and fishing are incredibly common. There's a concept within public health I want to share with you known as the injury pyramid. This concept demonstrates that for every fatal injury event, there are more non-fatal but serious injuries, followed by even more minor injuries than near misses, and finally, unsafe acts, with each of those categories, increasing in occurrences as you move down the pyramid. This concept is easier to understand with a visual. I'll add a link to one in the show notes. So the theoretical idea here is that each of those categories is in proportion to the others. Therefore, if you decreased the amount from the lowest and largest portion of the pyramid, that is unsafe acts, you would also have a decrease in each category above it on the pyramid, all the way up to fatal injuries. This theoretical model really gets down to the core of

this series. People all over the US are using their positions and abilities to create safer working environments for agricultural workers by raising awareness of job hazards. And I'd say given agriculture's importance in our society, combined with the rate of injury within the industry, this certainly warrants attention. And all of this brings us right to today's episode where I speak with Dr. Ashley McLeod Morin, Associate Director of Strategic Communication with the Southeastern Coastal Center for Agricultural Health and Safety, one of 11 centers established by the National Institute of Occupational Health and Safety, or NIOSH. Dr. McLeod Morin, and I discuss some of the unique occupational needs of workers in the southeastern coastal states, as well as the initiatives and impacts of the Southeastern Ag Health and Safety Center. So now, let's jump into our conversation as Ashley shares how she became involved in agricultural health and safety.

A

Ashley Morin 03:57

I grew up on a farm, grew up around agriculture, my parents had cattle growing up, and now they have a forestry operation. And so I was always involved in the agricultural industry. I participated in FFA. I mean, it was always something that I was really interested in and passionate about. And I would say over the last few years, getting my PhD, really have developed more of a niche passion for health and safety and how that intersects with the agricultural industry. And a lot of the unique needs that agricultural workers, but then also rural communities have, when it relates to health and safety. And so I'm really lucky that that's something that I get to work on every day in my job, and hopefully really moving the needle in the way the agricultural industry thinks about health and safety. But then also on the other side of that, how health and safety experts also think and consider the agricultural industry and all the people involved in that work as well.

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Phillip Stokes 04:58

That's a really good point, because you said how the agricultural field deals with, you know, safety issues, but also how the medical field, how people see, you know, the challenges, because it's not always so transparent. It's not always known, right?

A

Ashley Morin 05:16

Yeah, no, absolutely. Especially I think from my background, I come from a pretty rural community, at least pretty rural from Florida standards, and thinking about just how rural communities have knowledge about health, how they deal with their health, how they think about their health, in a really different way from some of these more urban populations, and especially whenever your, you know, your day to day work is working on the farm, your health really isn't always your number one priority. And that's not necessarily how it should be. But it isn't always easy to kind of leave your work, and drive longer distances to get to doctor's appointments and things like that. And I think that's also just something really important to consider for this population. And so, again, it's just something I'm really excited to be able to think more about and kind of dive into is this complex problem and bring together those two groups, in a small way, at least.

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Phillip Stokes 06:13

Yeah, of course. And so today, we're talking a lot about the CDC NIOSH Agricultural Health and Safety Centers. And that stands for Centers for Disease Control and Prevention, National Institute of Occupational Safety and Health. And there are these Agricultural Health and Safety Centers that are located throughout the country to work on this initiative that we've just briefly introduced. So can you tell us a little bit about those centers? And why they were established, when they were established, what they're there for?

A

Ashley Morin 06:43

Yeah, absolutely. So the National Institute of Occupational Safety and Health, or NIOSH, actually established this initiative back in 1990. And this initiative really was to develop research programs and prevention programs at universities throughout the country that really focused on agricultural safety and health programs. And so including our center, which is one of the newest centers, currently there are 10 other centers geographically located throughout the country. So there's 11 total centers that really prioritize agricultural safety and health, and also to look at the unique needs in their own region. So for us, we serve the southeastern coastal region. So all the states in the southeast that touch the coast, which include Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, as well as Puerto Rico, and the Virgin Islands. And so thinking about the unique occupational needs of those populations that work in that region. So thinking all the way from fishery workers that work in commercial fishing industries, all the way to migrant farm workers, as well as farmers and ranchers in these rural communities and agricultural communities. And so a really diverse population that our center focuses on, but other centers focus on the unique needs that their own region has as well.

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Phillip Stokes 08:01

Yeah, you know, I'm thinking here, you know, agriculture is such an essential aspect of human life, right? Our communities were founded around agricultural centers. And, of course, you know, risks and strains and things have been around forever. But you said these centers were established in 1990. So, I mean, what do you think it was around that time that really was the tipping point for NIOSH and for the CDC to come in and say, Okay, we really need a formal initiative with funds directed to this to help out the workforce.

A

Ashley Morin 08:44

Yeah, no, absolutely. I think that on the farm injuries, even though they're still prevalent today, I think they were a lot more prevalent then. I think it's really interesting to think about how the agricultural industry and all of these associated programs and equipments and things like that have really evolved over the past three decades. When we think about even what tractors looked like in 1990, that's very different from what they look like today. And all of the safety mechanisms that were put into place to make traditional farming safer, essentially. And of course, there's still a ways to go in thinking about how we can make that occupation even safer. But I think that those were some of the real concerns that were going on at that time when we look at when these centers were established in 1990. But then thinking about how things have really evolved today and the new risks that we have to be able to really pinpoint and learn more about and to be able to address that might not have existed then. I think that we're much more in tune to this whole idea of musculoskeletal disorders and injuries with

repetitive motions that were still happening and probably still a concern, you know, three decades ago, but maybe weren't as top of mind for us. And we also know a lot more about zoonotic and infectious diseases today and how diseases are, you know, transferred between animals and humans, especially with farmers working with livestock and how those diseases might be passed on to the human population. And just the the knowledge gain that we've had I think has been able to be instrumental in how we can really address a lot of these issues in making a safer workforce.

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Phillip Stokes 10:34

Yeah, if you didn't know about zoonotic diseases, you did as of like, 2020, right?

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Ashley Morin 10:40

Absolutely, yeah.

P

Phillip Stokes 10:41

With COVID-19? You know, one other thing that is common in the agricultural field and industry as a whole, is the disconnection between the majority of the public with where their food comes from. And I don't think it's anyone's fault. It's just kind of the way the industry has migrated, right? So when someone goes to the store, they see a head of lettuce, a potato, or whatever, but they don't see all the hands that have been a part of bringing that to the grocery store. And so they also don't know about the risks and some of the perils that can be associated with agricultural work. So you know, how important is it to have just public awareness about some of these risks as well? You mentioned at the beginning, making sure that health care providers and people that are serving those agricultural workers, making sure they know about the risks, but what about just the common person?

A

Ashley Morin 11:43

Yeah, no, absolutely. I think that's a great point. Like I said, earlier, I grew up on a farm, I grew up in agriculture and I've been living away from the farm for close to 10 years now. And it's even easy for me to really forget all of the day to day mundane things that go into the agricultural industry. And I think that that's especially true here in the southeast, when we think about the types of products that are grown in the southeast, and particularly here in Florida, and all the labor intensive crops that we have and what harvesting looks like here compared to some of the more traditional crops and industries in the Midwest. And so, you know, when we think about how difficult it really is to get even just a piece of fruit or a vegetable from the farm to the table and all the steps that go into the food supply chain, it's incredible. And so when we're thinking about, there's actually people out there in the fields, picking these fruits, handling them in a safe way, so that they're safe to get to our plates and for us to eat. It really is incredible. And so, yeah, I think that it's really on the first step to help make the public more aware of the agricultural industry. But then, there's these 10 other steps to really help the public understand what that actually looks like and that, yeah, your meat doesn't just come from Publix. And that's why I think that it's really important for us to make known, moreso the

risks of the agricultural industry to those people working in agriculture, and how we can really help them address those risks and those hazards. But then also, whenever, you know, I think it's easy for us to go to the grocery store and complain about prices. And think, gosh, like food has gone up so high. I know that I don't love paying my grocery bill every week. But then thinking about all the hard work and all the people that go into what we're buying at the grocery stores. I think that there's a lot more connections that can be made for the public.

A

Ashley Morin 11:43

Yeah, I think that's a great question, Phillip, you know, especially here in the southeast. And I'm gonna keep talking about it, because that's the area that I work in, of course. But I think that one thing that I love about living in Florida and living in the southeast is that our agricultural workforce is just as diverse as our agricultural industry is. I think that Florida and the Southeast is known to have so many different crops and agricultural pursuits. And we have a diverse workforce that serves those diverse needs. And so I think about, here in the southeast, we have three main different groups that I think of at least, and so, we have migrant farmworkers who, it sounds exactly like what the name says, that they really migrate around oftentimes and serve the needs of the agricultural industry. And they're the ones out there in the fields, picking fruits, picking vegetables, and doing a lot of really labor intensive work. And they're moving around with their families to serve the different needs of agricultural communities as the agricultural seasons evolve. We also have fishery workers that that are really prominent throughout the southeast along the coast. I know that I love getting oysters every winter, that's a big family tradition of mine, getting oysters every Christmas. But I think about all of the hazards and all the risks that go along with that for those workers, you know, there's a lot of repetitive motions. There's a lot of large equipments, oftentimes older equipment that might have other associated risks to it that might not be as top of mind. But then we also have those traditional farmers and ranchers. And so when I think about the traditional farmers and ranchers, I think about my dad, and a lot of my dad's friends that are still very much in the trenches in the agricultural industry and farming day in and day out. My dad did not farm full time when I was growing up. Like I said, we always had cows, and we now have forestry, but a lot of his friends did farm full time. And so they're working on tractors and large equipments all day, they're out there in the heat. They're with some unruly livestock oftentimes, and then also thinking about, you know, I mentioned that I'm from a rural community. And so I remember one time, whenever I was a child, that one of my dad's friends actually got into an accident with his tractor. And you know, it's a good 45 minutes to a hospital or to a doctor. And so thinking about the time it took for emergency services to be able to get out there and to be able to address accidents and things. And so, again, all of these, this really becomes a very complex picture, right, with lots of different colors going on. And so it's not even just kind of addressing those hazards, but then also those unique things of like, where are these farmers and or agricultural workers at out there in the field? How easy are they to get to? Or how easy is it for them to, kind of, get back in town when something like that happens?

P

Phillip Stokes 11:43

Yeah. And Ashley, if you could, like, just paint a picture for us. Like, you talked about the different types of people there are in the workforce, and how that is specific to different locations throughout the US. So if you could just tell people listening, like, what does an agricultural worker look like? Or what could an agricultural worker look like?

P

Phillip Stokes 17:17

Yeah, no, that's great. And a lot of times people do have an image of a farm worker, a farmer, and agricultural worker in their mind. And it may or may not be the actual, it may not be the truth of what's actually going on, especially if you're not involved. I do want to talk more about the Southeastern Coastal Center for Agricultural Health and Safety. Of course, that is the center that you are a part of. And so I want to talk about specifically, what are some of the initiatives within the center based on some of the challenges, the regional specific challenges here? And what are some of the things, the projects, the education, the work, being done here in the Southeastern Coastal Center?

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Ashley Morin 18:02

Yeah, I think that there's a lot of really cool things going on here at the Southeastern Coastal Center that I'm really excited to be able to be a part of. So like I said, we are currently one of the newest centers that's a part of this initiative. So we were established back in 2016. And so we actually just got renewed for another five years. So we're really excited to be able to continue a lot of the foundation that was laid in these past six years. And so talking about some of the priorities and initiatives, I mentioned earlier that I get to work with you, Phillip, on the outreach core. And so we have a pretty cool team that is really working to outreach the research that's being done in the center, but then also being able to raise awareness about agricultural safety and health in the southeast and get some really cool and exciting resources to the people working in the industry to inform them about those risks and hazards and how they can be avoided. We also have some really fascinating research projects that are being conducted as part of the center. And so we're about to launch two new research projects. We have one researcher who's continuing a lot of the work that he has been doing. And so those projects are really looking at surveillance of what's going on. And so I'm really excited for our audiences to be able to learn more about those research projects. Then we have another researcher who is actually continuing his research looking at chronic kidney conditions and some of the exposures in the agricultural industry, how they play a role in chronic kidney conditions in agricultural workers. And so some really, really exciting and innovative things being done. We also really work to elevate research that is being done across the country, but of course specifically here in the southeast and how we can support that work. The outreach core actually hosts a State of the Science Meeting each year where we bring together scholars and experts in agricultural health and safety fields to be able to talk about their work and share some of the cool research findings that they have. But one of the, my favorite things about the State of the Science Meeting, we also bring together agricultural stakeholders as part of that meeting so they can hear about that research, and actually work to implement a lot of those findings into their own work. And so we really try to bridge the gap between researchers, scholars, and our agricultural stakeholders. And so those are some of the fun things that we have going on in the center.

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Phillip Stokes 20:45

Yeah, I mean, it really sounds like the Southeastern Coastal Center, as well as other centers, look at this from different perspectives, kind of multiple different angles.

A

Ashley Morin 20:56

Yeah, no, absolutely. And I think that the Southeastern Coastal Center, and like you said, I think all of the centers this is true for, is a really interdisciplinary initiative where we're bringing together, even whenever we're just looking at the scholars and the researchers in the center, they are from all different sorts of disciplines. We have people working in fisheries and occupational safety and health, in IT and technology, AI. I think that we really do a great job of bringing together all of those scholars and bringing together the best of minds to be able to look at these issues because like we've already talked about agricultural safety and health is not a one sided issue. It's not a one sided topic. And so we can't look at it one sided. One of the things that I'm really excited about is working closely with Cooperative Extension, and making sure that Cooperative Extension knows about, of course, the center as a resource, but how we can better inform Cooperative Extension agents about agricultural safety and health topics, and maybe questions that they're getting from their clients and how they can address those. But then also connecting those people with our public health experts and our people working in public health, because those might not be relationships that they already have, or that could at least be pursued even further. And so I think that again, that's another really cool focus point here at our center is being able to bring together Cooperative Extension as well as public health. And so the center is actually an initiative here at the University of Florida that brings together the Institute of Food and Agricultural Sciences, so IFAS, as well as the Public Health College. And so I think that that's, that's really exciting. And something that you don't see every day.

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Phillip Stokes 22:46

Yeah, that's great. I'm picturing kind of this extensive web, with the center, being at the center, you know.

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Ashley Morin 22:52

Absolutely.

P

Phillip Stokes 22:52

Like, with the Southeastern Coastal Center, just bringing in all of these different, connecting all of these different groups, from hard science to stakeholders to farmers and everything in between.

A

Ashley Morin 23:02

Absolutely.

P

Phillip Stokes 23:03

So you've talked about some of the work of the Southeastern Coastal Center and some of the

specific initiatives. Tell us a little bit about the impacts or potential impacts of these actions.

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Ashley Morin 23:15

Yeah, no, absolutely. I think that there's a lot of really cool impacts that we're seeing already, like I said, where we're pretty new center, especially when we're thinking about this really big complex problem, that we're already seeing more information sources being generated. Our outreach core has developed a lot of what, at least I think, are really great communication resources, info sheets, white papers, really trying to disseminate information about a lot of these complex problems that we're working on. But then I think it's also really great for, as a center and as an agricultural industry to think about, what are some of the long term impacts of this work? I think it's, we always want to know about return on investment, of course, and as a citizen, as a resident, I think that that's something that's always top of mind for me that I like to think about, even when I put on my communication hat. And so I think that it's really a great goal for us to work towards how we can really mitigate morbidity and mortality in the agricultural workforce. And I think that our center is able to be really responsive to a lot of these things, so that we can create more relevant and timely research so that we can get to that big grand goal, of course. I think that we're also developing better data sources and being able to again, really being able to better understand the problems associated with agricultural safety and health and have better data to quantify where those essential risks really are. And of course, I think that long term, just thinking about the reduction of injuries and diseases and impacts in the agricultural industry.

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Phillip Stokes 25:00

Yeah, that is an interesting point because, of course, when you want to do good, when you want to help something, you want to see, like, results immediately. But just identifying the problem, just doing that surveillance that you mentioned, is the first step of many. And it's not the only step that I know the center is doing. But just understanding what is the landscape of injuries and health issues within agriculture, right?

A

Ashley Morin 25:30

Yeah, no, I think that's a great point. I mean, we all want instant gratification no matter what it is. But we know that the the scientific process is anything but instant. It takes time, and especially a lot of these complex experiments, it takes time to even conduct, and then to be able to get some great findings out of this, then be able to deploy interventions. And I think that that's really where our stakeholders play a really important role. I have a great stakeholder advisory board that I'm able to work with quite extensively of thinking about, Okay, it's great that we have these research findings, that we know about these risks, but how can we actually get this information out there into the communities and into the agricultural workforce? And like you said, that's going to take a while. And so I think that it's definitely not a short game. We're in it for the long game. And I think that it's really exciting to see how this is going to evolve, and hopefully make a real impact in the agricultural industry, moving forward into future decades.



P

Phillip Stokes 26:35

Yeah, that's wonderful. And can you tell our listeners a little bit more about where they can learn more, find out about the center and the research that is being conducted?

A

Ashley Morin 26:47

Yeah, definitely. So we actually send out a monthly newsletter. You can sign up for our monthly newsletter on our website. And I think that maybe we can link that in the show notes. And each month, we'll send you kind of a summary of some of the work and some of the products that we're doing in the center. But then we also like to share events or trainings that are happening throughout the region. And so I think there's a lot of really great information that gets sent out in that newsletter. We're also on Facebook, Instagram, and Twitter. So of course, we would love to have our listeners follow us there. And Phillip also hosts some really great monthly webinars, where we talk a little bit more with some of the researchers and some stakeholders in the center. And so I really encourage our listeners to also attend those webinars. I think that there's some really great information shared there. But you can get more information about all of this on our website at [sccahs.org](http://sccahs.org). And I'm sure we'll link that as well. But yeah, we're getting a lot of information out there. And we're always welcome to feedback from stakeholders, if there's something that we can better address or look at a little bit more, or partner with. We are always looking for new opportunities in that way.

P

Phillip Stokes 28:06

Yeah, that's, that's wonderful. It is so great to hear all about it. And the work that you do as the Associate Director of Strategic Communication for the Southeastern Coastal Center for Agricultural Health and Safety. I love our long names for things.

A

Ashley Morin 28:20

That was a mouthful, great job.

P

Phillip Stokes 28:20

It was so great to talk with you today. Yeah, oh, thank you.

A

Ashley Morin 28:23

Thanks so much for having me on, Phillip, I really appreciated this and enjoyed being able to talk about this important topic with you.

R

Ricky Telg 28:32

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