

Episode Title: Ticks on the Rise, Part 1: Why Farmers Should Pay Attention

Topic: Why Tick-Borne Disease Are Rising for Farmers

Summary: In this episode, we explore why tick-borne diseases are becoming an emerging concern across Iowa and the Midwest, particularly for farmers and other outdoor workers. Dr. Kathryn Dalton from the University of Iowa College of Public Health joins the conversation to break down what's driving these changes and why they matter. As tick populations grow and their active season expands, farmers are facing increased exposure risks simply due to the nature of their work. While there is still much to learn about tick exposure in Midwest farming populations, this episode lays the groundwork for understanding the scope of the issue and why awareness is more important than ever. In the next episode, we'll take a closer look at prevention strategies, symptoms to watch for, and what to do if you suspect a tick-borne illness.

Expert: Kathryn Dalton

Episode Quote:

"Ticks are everywhere now—they don't just live in the woods anymore. They're in parks, lawns, and the places people go every day."

– Kathryn Dalton, PhD, Associate Professor, University of Iowa College of Public Health in the Department of Occupational and Environmental Health

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.

00:33 E Ritchie

For many people, ticks used to feel like a seasonal nuisance—but that picture is changing. Tick populations are growing, their active season is getting longer, and diseases once considered uncommon in Iowa are becoming more familiar.

To help us understand what's happening and why farmers may face unique risks, we're joined by Dr. Kathryn Dalton, Assistant Professor in the University of Iowa College of Public Health. Her work focuses on helping farmers stay healthy and safe on the job, with a special focus on infectious disease.

01:09 K Dalton

My name is Dr. Kathryn Dalton, and I am currently an Assistant Professor in the University of Iowa College of Public Health, particularly in the Department of Occupational and Environmental Health. And my work all focuses on essentially helping farmers do their job safely and minimizing their risk of disease. Specifically, I focus a lot on infectious diseases. And right now, I'm excited to chat with you about tick-borne diseases, because we know that is a rising concern here in the Midwest that is particularly relevant for farmers.

01:46 E Ritchie

And are you specifically focusing on one tick-borne disease or one species of tick in particular, or are you looking at tick exposure all across the board?

01:57 K Dalton

We are looking more general, both in terms of species of ticks as well as the diseases that they do spread. Obviously, there are both tick species and diseases that we see more commonly here in the Midwest. However, the good thing is that a lot of these risk factors and as well as prevention measures are effective for all different types of species of ticks. So, the information that we will gather is very

generally relevant. However, obviously we are concerned more about these more prevalent diseases, things such as Lyme disease that we see here in Iowa fairly frequently.

02:38 E Ritchie

And what's making ticks and tick-borne diseases an emerging concern for farmers right now?

02:46 K Dalton

That is a tough question to answer actually for a variety of reasons. Well, we know from data that the actual tick population is growing. Last year, 2025 was a record year for tick populations across the country and, specifically, in Midwest that had a really large jump in tick prevalence from previous years. And so, it makes sense thinking that if we see more ticks, we're gonna see more tick-borne diseases. And we are starting to see that trend increase. Relevant to specifically farmers, we've long known that outdoor workers are at a higher risk of tick exposure and tick-borne diseases, which makes sense. They're outside more, they are going to be in contact potentially more with these different ticks in the area. However, surprisingly there hasn't been that much work specifically here in the Midwest to really capture the risk factors, particularly in different types of farming industries and if they are at an increased risk compared to general rural residents.

04:00 E Ritchie

What are some of the most common or concerning tick-borne diseases farmers in Iowa should be aware of? You mentioned Lyme disease. Are there others that are on the rise and becoming more of a concern?

04:12 K Dalton

Lyme is definitely the most prevalent tick-borne disease here in Iowa. While we see it predominantly in the northern and northeast counties, it is found in all 99 counties in Iowa. It has been detected in the past. And as I said before, we do know that the prevalence is rising. Not just the amount of people diagnosed, but we're seeing it encroach into these more Western counties in Iowa. And so that's definitely a disease that we are concerned about. But as you say, that's not the only one. The second most common is a type of rickettsial disease called Rocky Mountain spotted fever. That we actually see more on the other side of the state, more on the Western counties.

04:59 K Dalton

But then we're also seeing the rise of different types of tick-borne diseases, things like Ehrlichia and anaplasmosis, which wasn't that commonly seen in the Midwest and Iowa specifically five, 10 years ago. There's also new disease conditions such as alpha gal, which is spread by the Lone Star tick. And that is not necessarily an infectious disease. It's actually is a what they think an autoimmune condition, which causes an allergy to red meat and dairy, which if you are a farmer and that is a big part of your livelihood can cause a lot of concern. And so, we're starting to see the rise of these different disease conditions here in Iowa, which are all very concerning.

05:54 E Ritchie

At this point, can you paint a picture of what tick exposure actually looks like during a typical day on the farm?

06:03 K Dalton

Yeah, that's an interesting question, Libby. And I will say a big caveat to this is that there is still a lot we don't know. So far, the research has been mostly done in small populations. And there's been a lot of work done in the Northeast part of the country, as well as actually in Europe. And not as much has been done here in Midwest. And so, it's tough to know how much we can take that information relevant to our Iowa farm families. However, there are some risk factors that we do know that will increase your exposure to ticks, which then may make you more likely to be diagnosed with a tick-borne illness. These things include just the amount of time you spend outside.

06:52 K Dalton

Particularly in areas of known tick habitat, which can be kind of these border regions of really tall grasses or wooded areas with a more straightforward lawn or garden crop field. And so, the more time you spend in those areas, let's say for instance, you know, repairing fences that could put you more at risk. Also, we know from work that has been done in seasonal migrant workers, sleeping outside is also shown to be a big risk factor. That's probably not as much of a concern here in the cold Iowa Midwest states. However, we see that in our more southern states. Having livestock can also be a risk factor in itself, because we know that these ticks not only can they attach to us and affect our health, but we know that these can also impact our livestock animals. And actually, they can get tick-borne diseases as well, which can affect their health and overall productivity.

07:59 E Ritchie

In the past, it seemed like there were more definitive seasons in which you had to be more aware of your time spent outdoors because tick populations would be prevalent. It seems like now that timeframe to where they're not active is getting shorter and shorter. Can you speak a little bit about that?

08:24 K Dalton

Yeah, so it is still the case that our late spring / summer is when we are most at risk. We know that that's when ticks are most active and just will be out in a greater prevalence. Both the adult ticks and what we call nymph ticks, which you can kind of think of as like teenage tick. That's when both of those two different life stages of the tick are out and about, and we are more likely to come into contact with them. However, you are exactly right in that as we are seeing warmer springs and warmer early winters, ticks will be out and about. And in fact, any temperature over 40 degrees will cause ticks to come out of hibernation. So even these fluke warm days, say in like February, we will see ticks starting to come out now. And that is contributing to the increased prevalence because if we're seeing a longer tick season, that's just going to give more opportunity for these ticks to come in contact with farmers and other individuals. And so, it's definitely concerning, and we know that these warming winters and climate change overall is driving changes in the tick population, which will then have inferences to our own health.

09:52 E Ritchie

So, when you're just in your lawn and your grass is short, is that still risk of exposure? Because it used to be more rural areas, urban areas didn't really have to worry about it. But I have noticed that's changing.

10:08 K Dalton

Yes. Interestingly enough, while we're talking today about farmers and rural areas, data in the Northeast actually showed that it's suburban residents that are most at risk of tick exposure. Because just like you say, ticks love this like border areas. So, they don't necessarily need like truly isolated wooded areas. They tend to prefer where people will go. And so, yeah, we know that like gardening is a big risk factor for residents, both suburban, rural, and even urban populations as well. Walking the dog: absolutely. It's a risk for your dog in that it'll hop on your dog and then can hop on to you.

Your dog's bringing it inside the house even. But even just yourself, as you're walking, it's been shown in trails, public parks, dog parks as well too. Ticks are everywhere now.

11:09 E Ritchie

Ticks are small, but the risks they carry are becoming harder to ignore. As Dr. Dalton explained, changing weather patterns, expanding tick populations, and increased exposure opportunities mean farmers and rural families need to think differently about prevention and awareness. In our next episode, we'll focus on exactly that—how farmers can protect themselves, what symptoms to watch for, and why diagnosing tick-borne illness can be more complicated than many people realize.

11:48 E Ritchie

After spending time outdoors, take one small step to reduce your risk of tick-borne illness by doing a tick check. You can find a helpful graphic in this episode's resources that walks through the key areas of your body to check for ticks and the appropriate clothing to wear to reduce tick bites.

We have included a link to Dr. Dalton's Tick Study in this episode's resources as well. We will discuss this study in further detail in our next episode, "Ticks on the Rise, Part 2: Prevention and Detection for Midwest Farmers."

12:20 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, or email us.

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Episode Resources

- [Check Your Body for Ticks, Graphic](#), GPCAH
- [Tick-Borne Disease in Iowa](#), Iowa State University
- [Kathryn Dalton's Tick Study](#), Webpage
- [Tick Study Post Card](#)

Photo

