

Biosecurity Publications

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SPEAKERS

Dr. Glenda Dvorak, Speaker 3, Christa Hartsook, Olivia Hanlon



Christa Hartsook 00:15

Hello, and welcome to the Small Farms Podcast, a production of the Small Farms Program at Iowa State University Extension and Outreach. Our podcast covers the opportunities and challenges associated with rural life.



Olivia Hanlon 00:29

In this episode I visit with Dr. Glenda Dvorak, Lead Public Health Veterinarian with Iowa State University, and we are talking about some new Biosecurity resources that are available. I'm Olivia Hanlon, Farm Food and Enterprise Development Education Extension Specialist and we hope you enjoy the show. Glenda, this is your first time on the podcast. So to kick us off, why don't you start by telling us a little bit about yourself and what your role is here at ISU?



Dr. Glenda Dvorak 00:53

Sure, Olivia, and thanks for having me on the show. I am currently the Assistant Director and Lead Public Health Veterinarian with the Center for Food Security and Public Health at Iowa State University's College of Veterinary Medicine. I've been with the Center for almost 20 years, I grew up on a small farm in northern Illinois and participated in 4-H throughout my high school years. So I've always had an interest in small scale production settings. I came to Iowa State for my education and I've lived in Ames ever since. I completed degrees in zoology, aquaculture, and veterinary medicine, and I also have a Master's in Public Health from the University of Iowa. My primary role at the Center is developing educational materials for veterinarians and producers on farm biosecurity and zoonotic diseases. I always approach any project with the goal of finding a way to take complex animal health issues and breaking them down into smaller sized pieces that can be useful, as well as adaptable for a variety of production settings, and hopefully in a way that's less overwhelming.

O Olivia Hanlon 01:55

Awesome. We appreciate those less overwhelming ways of saying things, Glenda. So as part of your work, you helped put together some of these new publications on biosecurity that we're talking about today. Why don't you tell me a little bit about how these publications came about?

D Dr. Glenda Dvorak 02:10

Sure. So of course, we know that diseases of animals are an ever present threat for all producers with animal health and economic impacts as well as management challenges, but they can be particularly devastating for small scale producers. And while the risk for disease can't be totally eliminated, decreasing exposures to disease causing agents can reduce this risk and the impact on animal health and production, as well as producer profitability and sustainability. So implementing biosecurity measures every day can do just that. So for this project, we wanted to develop resources to help small scale producers improve biosecurity and disease prevention efforts on their farms. These farms account for the majority of all livestock and poultry farms in the US and in Iowa. So fortunately, we received funding from the North Central Region SARE program to do just that, as well as had the opportunity to work closely with the ISU Extension and Outreach Small Farm Sustainability program personnel, including yourself.

O Olivia Hanlon 03:09

Yes, Glenda, we are very excited to be a part of this project. So moving on, why don't you give us a general overview of the project itself and how these publications play a role in it?

D Dr. Glenda Dvorak 03:19

Sure. So effective biosecurity involves two main areas. The first is identifying disease risk areas for the farm with movement of animals, people, vehicles, on-and-off the farm being one of the biggest risks, but there also needs to be focus on the spread between animals, so focus on the routes or ways diseases are transmitted. And these are broken down into five different routes direct contact between animals, contact with contaminated objects called fomites, ingestion, aerosol, and vectors. Then by taking actions to block each of these routes of transmission, producers can prevent a number of diseases at once. So for this project, we developed a number of biosecurity resources. First, we developed a biosecurity Checklist to help livestock and poultry producers identify disease risk areas for their farm. Once the risk areas are identified, there are corresponding tip sheets and videos addressing each of these risk areas. Explaining why and how this is an important disease risk area and what biosecurity measures can be taken to reduce disease threat. We also develop materials addressing biosecurity actions for each of the routes of transmission, as well as developed species specific tables that show common diseases for each of the routes. These tables help a producer see how many diseases the biosecurity actions can help to prevent. We also developed handouts for the cleaning and disinfection of common farm items such as footwear, birth assistance equipment, and neonatal feeding equipment. This project is actually one component of a very large and growing library of biosecurity resources developed for livestock and poultry producers through

our Center. Other projects at the Center have created a number of species-specific biosecurity materials, including biosecurity plan templates. The Center also has a large library of disease-specific factsheets that discuss clinical signs in animals and sometimes people, if they're zoonotic, as well as prevention measures that can be taken.

O Olivia Hanlon 05:17

Okay, go. Now let's dive in a little bit deeper here and talk about what topics these tip sheets covered.

D Dr. Glenda Dvorak 05:23

Sure, the tip sheets break down key biosecurity areas for all farms. These include controlling access to the farm, managing the movement of animal, people, vehicles and equipment on and off the farm, maintaining animal health and monitoring for disease, the handling and disposal of manure, litter, bedding and carcasses, cleaning and disinfection, controlling insects and non production animals such as wildlife, rodents and birds, and ensuring safe feed and water. There's also a tip sheet for those farms that have visitors such as agritourism activities, and the biosecurity measures that can be taken to protect the animals on the farm, as well as for those that are visiting. And while that list seems very long, producers can work on one area at a time to improve their biosecurity step by step, and each step that they take adds an additional layer of protection for the animals on the farm against disease.

O Olivia Hanlon 06:21

Okay, Glenda. So what is the overall goal of these publications when they're all put together and producers are trying to utilize them?

D Dr. Glenda Dvorak 06:28

We developed these materials to help small scale producers learn about and implement biosecurity on their farms. We know that decreasing disease on the farms helps not only keep the animals healthy, but it can increase sustainability and profitability by reducing illness, production losses, and even the death of animals. So we know that biosecurity can seem overwhelming at first, but we wanted to develop materials that can help make it less daunting, but also applicable for the diversity of small scale producers that are out there.

O Olivia Hanlon 06:59

Okay, Glenda, these sounds like some really good resources for some of our small scale producers out there. So how can our listeners find these resources?

D Dr. Glenda Dvorak 07:08

Sure, all the resources that I have described can be found on the Center for Food Security and Public Health website at www.cfsph.iastate.edu/biosecurity, and producers who want to develop or improve their biosecurity plans can find checklists, tip sheets, videos, and more on this site. When you get to the site, the main landing page is set up to help producers get started. Regardless of species, there's a step one document that involves looking at movement risks for the farm, then you go to step two. And that's a checklist to help find those particular disease risk areas for your farm. And then you can go find the corresponding tip sheets and videos for each of those risk areas you identify and this will help you determine the needed biosecurity measures to take. For those that want to dig in a little bit deeper, the website also has species specific biosecurity resources that will help you identify next steps to take. So if you find you're doing something really well, and you want to keep improving that that's a good place to look. And then as I mentioned, there's also links to those disease transmission resources, as well as the customizable biosecurity plan templates.

O Olivia Hanlon 08:23

Okay, for the species specific ones that you mentioned, what species are covered in those?

D Dr. Glenda Dvorak 08:27

There's materials for beef cattle, for dairy cattle, swine, poultry, and sheep.

O Olivia Hanlon 08:32

Okay, very good. So what is one tip Glenda, that you have for listeners on how they can best utilize the information in these publications?

D Dr. Glenda Dvorak 08:41

Sure. So as I mentioned already, I know biosecurity can be very overwhelming at first, especially if you're just getting started. But just take it step by step, work through the checklists, try to identify those risk areas for your farm, and you might find out even from the checklist that there's biosecurity practices that you're already doing well, so good job, keep it up. Then just add one prevention practice each week or maybe each month. But the key is to use it consistently every day and then just keep building each day, each month and that will help improve your biosecurity on your farm.

O Olivia Hanlon 09:14

Absolutely. Glenda Is there anything else that we need to know before we wrap up our podcast today?

D Dr. Glenda Dvorak 09:20

Yeah, just recognizing that each biosecurity measure that you add on to or that you add to your

mean, just recognize that each biosecurity measure that you add on to or that you add to your farm increases your layers of protection for your farm, your animals, and your sustainability in preventing disease.

O Olivia Hanlon 09:32

Wonderful, thank you so much for joining us Glenda, it was great to have you on.

D Dr. Glenda Dvorak 09:36

Thank you for having me on the show.

S Speaker 3 09:38

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