

Biosecurity Basics and Beyond: Tools to Defend Your Flock

Webinar Transcript – March 28, 2019

ANDY SCHNEIDER: Hello, everyone, and thank you for joining the webinar. We are excited to be celebrating Bird Health Awareness Week. This is part of the USDA's Defend Your Flock campaign, promoting awareness about the importance of biosecurity and ways to prevent the spread of infectious poultry diseases. We want to help you get your flocks ready for spring with the expanded biosecurity resources. I'm Andy Schneider, known to most as the Chicken Whisperer.

Today I'm joined by Doctor Joanna Quinn and Doctor Wood Nicholson of the USDA and Doctor Megin Nichols of the Center for Disease Control. Our goal today is to share tips for adding and replacing birds, when you are just starting out raising poultry or have years of experience, practicing good biosecurity is the best way to keep flocks disease free.

Before we get started, we want to let you know that closed captions are available for this program. Type the URL that you see into your browser. You can use this link at any time during the program.

>> Now we will take a few minutes to introduce ourselves. I'm Andy Schneider, editor in chief the Chicken Whisperer, national spokesperson person for the USDA APHIS avian health

program, and author of the Chicken Whisperer's guide to keeping chickens, and host of the basically yard poultry with the Chicken Whisperer, Web radio show and Podcast. Doctor Quinn?

DR. QUINN: Thanks, Andy. I'm a veterinary medical officer working with USDA. My position is a poultry health specialist, and I work in District I, which is located in the eastern United States. My educational background is in poultry and avian medicine. In my position, I serve as a resource on poultry health issues, working with the State agriculture departments, the commercial poultry industry, and with small flock owners.

My focus is on avian influenza and disease prevention through biosecurity. I'm happy to be with you today.

ANDY SCHNEIDER: Thank you, Doctor Quinn, Doctor Wood, please tell us a little bit about yourself.

DR. WOOD: Thanks, Andy. I'm a poultry specialist veterinary medical officer with USDA. And I also work with Doctor Quinn on the east coast. My role with USDA is serving as a resource, mainly with poultry issues and avian influenza surveillance, especially with the live bird marketing system, commercial industry and backyard poultry groups. My areas of interest include poultry, diseases that affect animals and people, and outreach education. I'm happy to be with you today.

ANDY SCHNEIDER: Thank you, Doctor Wood. Doctor Nichols, please tell us a little bit about yourself.

DR. NICHOLS: Hello. My name is Megin Nichols, I'm a public health veterinary in the division of food borne, water borne and environmental diseases at the Center for Disease Control. I currently work on multi-state outbreaks of Salmonella and e-coli resulting from exposure to animals and pet products. Every year CDC investigates outbreaks of Salmonella illnesses in people linked to backyard poultry. I'm happy to be here today and to represent the CDC and to participate in the webinar. Back to you, Andy.

ANDY SCHNEIDER: Thank you, our goal today is to provide information about keeping birds healthy that all flock owners can use, from people who raise chickens and other breeds in their backyards, to bird lovers who participate in shows and fairs, to commercial enterprises that raise the poultry and eggs that we consume.

We will cover guidance for adding or replacing poultry, important biosecurity practices for spring, and recognizing signs of disease and using APHIS and CDC resources. If you have questions, feel free to submit them by clicking the Q&A button located at the bottom of your screen. APHIS and CDC veterinarians will answer all questions after the webinar has concluded.

The Q&A will be posted along with the recording of this webinar on the APHIS website. Be sure to follow the campaign

on FaceBook and Twitter to find out when the recording is available. We will share those on-line des nations at the end of the webinar.

While chicks can be purchased from some places year-round, many people look to start or flow their flock in the spring. In spring, February through June, you can find the broadest selection of breeds from breeders and hatcheries, whether you are expanding your flock or starting off for the first time, we will share resources and pointers throughout this webinar to help you begin or add to your flock.

The best way to keep your flock disease free is to start out with healthy birds. Dr. Wood, please tell us about the National Poultry Improvement Plan, the updated guidance for flock owners who plan to start or add to their flocks this spring and how biosecurity fits into the process.

DR. WOOD: Thanks, Andy. The National Poultry Improvement Plan, known as NPIP, is a voluntary cooperative federal-state-industry program established over 80 years ago aimed at improving poultry health. The NPIP was originally established to eradicate a disease called Salmonella pullorum, which was causing 80 percent mortality in baby chicks. Today we have eradicated Salmonella pullorum in the commercial poultry industry. With such success in eradicating pullorum disease, the NPIP was extended to include testing and monitoring

and surveillance for additional poultry diseases that cause illness such as avian mycoplasmas, avian influenza, and other types of Salmonella.

The NPIP has three main objectives: First, the cooperation of the industry, state, and federal government is essential to improve poultry and poultry products as a country by promoting new diagnostic technology. Second, NPIP programs examine the health status of the commercial poultry industry, such as broil flocks, Turkeys and egg laying birds, by monitoring their primary and multiplying breeding stock.

Finally, the NPIP establishes the standard operating procedures for sample collection, diagnostic tests performed, and the laboratory protocols for conducting tests under the NPIP. Participation in the NPIP is voluntary, and currently all 50 US states participate as well as Washington, D.C. and one US territory, Puerto Rico. The NPIP is very proud to be supported by so many poultry organizations and associations. You can see some of them listed here on this slide. The NPIP works well with and represents all sectors of the poultry industry. No one is left out.

ANDY SCHNEIDER: Thank you for the overview, Doctor Wood. Doctor Quinn, please tell us how backyard and commercial growers can use the services and resources available through the NPIP.

DR. JOANNA QUINN: The NPIP offers numerous benefits. Some of the most significant advantages to being an NPIP participant include being proactive in protecting the health of your flock through voluntary monitoring and testing; preventing vertical transmission of disease from hen to chick; knowing that you have purchased your birds from NPIP participating flocks that have met very specific disease prevention conditions; enjoying the ability to move your flock across state lines without additional Salmonella and AI testing; minimizing the risk of bringing Salmonella contaminated eggs into your home; having access to best management practices; and the big benefit is that you can receive up to 100 percent indemnification if your birds are destroyed due to avian influenza.

A new addition to the NPIP that I would like to highlight is the NPIP biosecurity principles program. This program contains the best management practices and principles and is designed to prevent the introduction and spread of any type of infectious disease.

Large commercial and small backyard poultry operations can take these biosecurity principles and apply them by developing a site-specific plan for their operation.

These biosecurity principles include an auditing tool for the commercial operations to ensure their plans are designed appropriately to prevent the introduction and transmission of

disease.

It's important to remember that what you do with your flocks can affect all flocks, even those that are miles away. In order to prevent the spread of disease, the NPIP has identified 14 biosecurity principles for raising poultry. Implementing stronger biosecurity practices encompasses three main areas of focus: First, creating structural barriers and maintaining them. For example, keeping your chickens and coop within a fenced run. Second, instituting operating procedures and policies that reinforce good biosecurity. And third, ensuring that biosecurity is an every day, every time effort.

USDA has begun the full roll out of communicating the 14 NPIP biosecurity principles to all growers. This expansion began in the fall with guidance on three of the 14 principles. First, actions relating to personnel, meaning anyone who comes in contact with your flocks. Second, biosecurity practices related to preventing disease resulting from contact with wild birds, rodents, and insects. And the third point USDA provided expanded guidance on for all growers related to preventing the spread of disease through the use of vehicles and equipment. USDA will continue to provide guidance on additional principles through 2020. Another biosecurity principle discusses replacement poultry. We are introducing guidance for this principle today. Replacement poultry are when any birds are added to a flock.

Starting out with healthy poultry is the best way to keep flocks safe from disease.

You can bring disease to your flock by adding infected or diseased birds to a flock. It's important to remember that birds, even new born chicks, or ducklings, can carry disease and germs, even when those birds appear healthy. Back to you, Andy.

ANDY SCHNEIDER: Thank you, Joanna. The most important thing to remember about the NPIP replacement poultry principle is to only purchase poultry or eggs from breeders, hatcheries, and or dealers that participate in the NPIP program. If you are starting or adding to a backyard or exhibition flock before buying, make sure that the poultry you purchase have been tested for the same diseases that your current flock has been tested for.

If you purchase poultry in person, check for signs of good health and approximate age. Do not purchase birds that appear old or unhealthy. If you purchase by mail order, make sure that baby chicks have been vaccinated. Check which vaccines are needed in your area based on past disease outbreaks and compare that to which vaccines the hatchery has administered. Doctor Wood, please review how this principle applies for commercial growers.

DR. WOOD: This NPIP principle works the same way for commercial growers as it does with backyard poultry. Only add

replacement poultry from health monitored flocks that are in compliance with the NPIP regulations and perform standards. When looking for replacement poultry on the NPIP program, you can request a copy of the hatchery or source farm's biosecurity protocols. Back to you, Andy.

ANDY SCHNEIDER: When you bring new birds home, quarantine the new additions for 30 days. Check for sneezing, coughing, nasal drainage, swollen eyes, mites, lice, and other health issues daily.

This includes birds that you purchase from hatcheries or ones that you buy at fares or shows.

After new birds are combined with your existing flock, check the original stock daily for any signs of illness. The stress of adding new birds to an existing flock can bring on an underlying illness you never knew they had. To prevent bullying, add young poultry or started poultry to your existing flock when they are all about the same size.

Be sure to clean and disinfect tools, cages, and any other equipment used for transport. Doctor Wood, please describe how new birds should be brought into commercial farms.

DR. WOOD: Always transport replacement poultry in equipment and vehicles that are regularly cleaned, disinfected and inspected. Make sure adequate biosecurity protocols are in place for equipment and personnel involved with moving

replacement poultry. The tractor trailer carrying the birds should follow premises entry biosecurity protocols when entering the farm. Anyone loading or delivering poultry should wear site specific clothing. Same for anyone loading poultry cages in their trailer. All should wear site specific clothing or should not enter the line of separation, known as the LOS, that separates the poultry from unclean areas.

Minimize the risk of disease by making sure that people transporting birds in cages from the truck to the poultry house wear clean clothing and foot wear, use a dedicated foot bath if available, and or remain outside of the line of separation.

Empty cages should be disposed of in a safe manner or returned to the trailer and then cleaned and disinfected before taken to another site. Andy, I will turn it back over to you.

ANDY SCHNEIDER: Doctor, Doctor Wood, warmer weather requires special attention to biosecurity for all poultry owners with migratory season, chick season, and show season, your flock is more vulnerable to disease and extra precautions are important. First, pay attention to wild birds, rodents and pests, keep these away from your flocks with proper end closures. Make sure your poultry house or coop receives regular and thorough cleaning and disinfecting. Clean up spilled feed or spent litter as quick whether I as possible. Make sure you wash hands and provide boot covers which is preferred, or scrub your boots before and

after entering a poultry area. Designate special clothing for poultry care. Clean and disinfect tires and equipment before moving on or off the property. Do not borrow tools or equipment and make sure you properly care for eggs.

Practicing with biosecurity every day is the key to healthy flocks. To summarize our main points so far: Always purchase birds from an NPIP participating hatchery. Separate any newly purchased birds for at least 30 days and watch the flocks for signs of illness when they are united.

Know the signs of disease and report them immediately. Disease outbreaks among poultry are devastating. Protecting the health and safety of our nation's poultry must be a top priority for all flock owners. In addition to the many people across the country who now raise birds in their backyards, the US poultry industry is one of the largest in the world and an important sector of our agricultural economy. If US poultry are exposed to highly contagious diseases, like highly pathogenic avian influenza, HPAI, and Virulent Newcastle Disease, the impact on our economy can be severe and even international trade can be impacted. Doctor Quinn, can you talk more about the importance of biosecurity practice?

DR. QUINN: Absolutely. Biosecurity essentially means protecting or safeguarding life. It involves using common sense practices to protect your poultry and birds from all types of

disease agents, viruses, bacteria, fungi or parasites, doing everything possible to protect your birds from infectious diseases, like Virulent Newcastle Disease and avian influenza. Preventing disease causing germs from entering your or leaving your premises, and spreading to your neighbors. We saw how quickly disease spread and the impact it had on backyard and commercial poultry with the avian influenza outbreak in 2014 and 2015, and with the current Virulent Newcastle Disease in California. Implementing stronger biosecurity practices that encompass structural barriers and good biosecurity operating procedures are essential to protecting your flock as well as your neighbor's flock. And remember to be effective, follow your biosecurity practices every day, every time.

It's always important to know the signs of illness and report them immediately in order to prevent your flock from spreading disease.

Extra vigilance is especially required whenever you introduce new poultry to your flock.

Knowing the signs of disease can aid in getting quick, proper care for your birds and reduce any bacteria or disease spread. When checking your birds, look for the following signs: A sudden increase in bird deaths in your flock; sneezing, gasping for air or nasal discharge; watery and green diarrhea; a lack of energy and poor appetite; a drop in egg production or soft or thin shelled

misshapen eggs. And building a relationship with your veterinarian can help you maintain a healthy flock. There are several immediate steps you must take if you suspect disease in your flock: First, immediately quarantine any birds that show signs of illness. Second, call your vet, APHIS or state officials when you see unexplained symptoms or illness. The APHIS number is shown on this slide. 1-866-536-7593.

If you are a commercial grower, follow your company's guidance for disease in your operation. I will turn it back over to you, Andy, to review the resources available to help growers practice good biosecurity this spring and throughout the year.

ANDY SCHNEIDER: Thanks, Joanna. The APHIS Defend the Flock website has six checklists including a new list for handling replacement poultry as well as those for cleaning and disinfecting, proper practices for personnel, vehicles, equipment, as well as avoiding wild birds, rodents, pests, information that is especially important for spring. At the APHIS Defend the Flock website, you can also access a “know your numbers” card. This is a handy place to keep all the phone numbers for your local vet, extension service, and the USDA toll free hot line, videos and other resources.

This spring APHIS is introducing an E newsletter to keep you up to date about best practices in biosecurity as well as tips and resources. Through the newsletter, you will also get to meet the

veterinarians and other professionals at APHIS who help us keep the nation's flocks safe from disease.

To sign up for the newsletter, go to the URL shown here. Click on the red envelope on the upper right of the APHIS home page. Click on the plus sign next to veterinary services to open the topic list. You will also be prompted to choose the type of subscription that you want and enter your e-mail address. Click the box within the newsletter from the drop down menu. You will also have the option to sign up for other newsletters as well.

Now, I would like to turn the presentation over to Doctor Nichols to take us through some of the resources available through CDC and talk about human and bird health.

DR. NICHOLS: Thank you, Andy. Owning backyard poultry can be a great opportunity to learn more about where our food, such as eggs and meat comes from. It is important to keep both your backyard flock and your family healthy if you own poultry.

Salmonella is a germ that poultry can carry in their gut and still appear healthy and clean. However, this germ can cause people to get sick. CDC estimates that over 1 million people get sick with Salmonella every year.

Poultry might have Salmonella germs in their droppings and on their bodies, including their feathers, feet, and beaks, even when they appear healthy and clean. These germs can get on cages, coops, feed and water dishes, hay, plants and soil where

the birds live and roam. Germs can also get on the hands your recollection shoes, and clothes of people who handle or care for birds. People who have contact with items can get sick without actually touching one of the birds.

Children younger than five years, adults older than 65, and people with weakened immune systems are more likely to have a serious illness from Salmonella. Since 2000, there have been 76 Salmonella outbreaks, this includes 51,288 illnesses, 950 hospitalizations and seven deaths. This is why it's so important to always wash your hands with soap and water right after touching poultry or anything in the area where they live and roam. Adults should supervise hand washing by young children, and if soap and water are not readily available, we recommend you use hand sanitizer.

Another important tip is that you don't want to let poultry inside the house, especially in areas where food or drink is prepared, served, or stored. You can also set aside a pair of shoes to wear while taking care of poultry and keep those shoes outside of your house. Stay outdoors when cleaning any equipment or materials that are used to raise or care for poultry, such as cages or feed or water containers. And don't eat or drink in the area where birds live or roam.

Don't kiss your birds. We recommend that you don't kiss your birds or snuggle them or touch them to your face or mouth

because of the risk of Salmonella. Households with young children, adults over the age of 65, or people with weakened immune systems need to carefully consider the risk of Salmonella infection before purchasing poultry to start a backyard flock. When having backyard poultry and collecting eggs, it's important to remember the five C's: First, keep the coop clean. You want to maintain a clean coop. Cleaning the coop floor, nests, perches, egg boxes, and doing so on a regular basis will help keep any eggs clean. Next you want to collect eggs often. Eggs that spend a significant amount of time in the nest can become dirty or break, and cracked eggs should be thrown away. Next, clean eggs with fine sand paper, a brush, or a cloth. Don't wash eggs because colder water can pull bacteria into the inside of the egg.

Cool eggs by refrigerating them after cleaning them, and cook eggs thoroughly. Raw or under cooked eggs can contain Salmonella bacteria that can make you sick.

If you are looking for additional information, we have some on the CDC website, including info graphics that can be printed. Back over to you, Andy.

ANDY SCHNEIDER: Thank you, Megin. You can find the new home for the USDA APHIS Defend the Flock public education program at [APHIS.USDA.GOV/animalhealth/defendtheflock](https://www.aphis.usda.gov/animalhealth/defendtheflock). Be sure to

check out more helpful information on our social media channels. If you are an educator involved with young organizations or programs, or looking for training materials, we would love to share our come pain with you. Contact us via social media or through the website. This presentation along with answers and questions will be available for download from the Defend the Flock website in the next week or so. Be sure to follow Defend the Flock on FaceBook and Twitter to be notified when the presentation is available. And use the hash tag DefendtheFlock when sharing or posting information to help us spread the word. There are lots of resources available to make sure you practice good biosecurity. Every time, every day. Here are the publications where you can find more information about the things we have discussed today.

You can also find organizations in your state and community that can help you keep your birds, your farm, and your bird loving family safe and healthy.

And before we go, we would like to thank USDA APHIS and the Center for Disease Control and Prevention for hosting this webinar. On behalf of my co-hosts, Doctor Chrislyn Wood and Doctor Joanna Quinn of USDA, APHIS, and Doctor Megin Nichols from the Center for Disease Control and Prevention, and me, Andy Schneider, the Chicken Whisperer, thank you for joining us and let's keep our poultry healthy together!