OFF THE HOOF

Cooperative Extension Service
University of Kentucky
Beef IRM Team

KENTUCKY BEEF CATTLE NEWSLETTER JUNE 1, 2025

Each article is peer-reviewed by UK Beef IRM Team and edited by Dr. Les Anderson, Beef Extension Specialist, Department of Animal & Food Science, University of Kentucky

This month's newsletter includes:

Timely Tips

Dr. Les Anderson, Beef Extension Professor, University of Kentucky

Spring-Calving Cow Herd

- Cows should be on good pasture with clover and preferably low endophyte levels in fescue for the spring breeding season. Keep pastures vegetative by clipping or making hay. They should have abundant shade and water. Our goal is to have cows become pregnant before July when temperatures and heat stress can ruin the "spring" breeding season. Several supplement options are available if your pastures are low in red clover and heat stress appears to be an issue. Contact your ANR Agent for more information.
- Observe the cows and bulls as the breeding season continues. Watch bulls for injury or lameness and change bulls if a high percentage of cows are returning to heat. Record cow breeding dates to determine next year's calving dates and keep records of cows and bulls in each breeding group.
- Keep a good pasture mineral mix, which contains adequate levels of phosphorus, vitamin A, selenium and copper, available at all times.
- Consider a special area for creep grazing calves, or practice "forward grazing" this summer, allowing calves to graze fresh pasture ahead of the cows. This can be accomplished by raising an electric wire or building a creep gate.

Fall-Calving Herd

- Pregnancy test cows if not done previously.
- Cull cows at weaning time
  - Smooth-mouthed cows
  - Cows weaning light weight and/or poor-quality calves
  - Open cows
  - "Problem cows" with bad feet, teats, udders, etc.
- Select replacement heifers on the basis of:
  - temperament
  - conformation
  - weaning weight

- dam and sire records
- Select more than needed to allow for culling after a short breeding season

General

- Finish harvesting excess pasture as hay soon! It should be cut before it becomes too mature. Be sure and replenish your reserves. Try to put up more than you think you will need in case of a late summer drought.
- Pasture should supply adequate energy, protein and vitamins at this time. However, be prepared for drought situations. Don't overgraze pastures so that recovery time will be faster. Overgrazed pastures will recover very slowly during July/August.
- Keep pastures small for rotational grazing so that nutritive quality can be maintained. They should be small enough so cattle do not graze longer than a week. As the season progresses, you need several paddocks to give each properly stocked pasture about 4 weeks' rest.
- Maintain a clean water supply and check it routinely. Water is extremely important in hot weather.
- Control flies. Consider changing insecticides and/or methods of control this year, because insecticide resistant flies may have developed if you have used the same chemical year after year. Consider pour-on and sprays that allow you to put cattle in the corral or through the chute with little stress on them. It will make subsequent trips through the "chute" less stressful.
- Prevent/Control pinkeye
  - consider vaccinating
  - control flies
  - clip tall, mature grass
  - treat problems quickly
- Clip grazed-over pastures for weed control and so that seed heads do not irritate eyes. Pastures should be kept in a vegetative state for best quality.

Changes to Livestock Risk Protection Insurance for the Upcoming Reinsirance Year

Dr. Kenny Burdine, University of Kentucky

Over the last several years, I have focused a large share of my Extension program on Livestock Risk Protection (LRP) Insurance as a price risk management tool for feeder cattle. While there are a lot of tools and strategies available, LRP has several advantages including subsidized premiums and the ability to cover most any quantity of cattle. It has been made more attractive in recent years through increased subsidy levels and allowing for premiums to be paid after policy ending dates. Changes to federal insurance programs are very common, but several LRP changes for the 2026 reinsurance year were significant and I wanted to briefly talk about a few of them this week. These changes will impact policies that are effective starting July 1, 2025.

Forward Priced Cattle

In the past, cattle had to be in one's physical possession to be covered by LRP. With the new insurance year, forward contracted cattle can be covered prior to the insured having physical possession of them. The insured must have physical possession of the cattle during the insurance period and receive those cattle at least 90 days before the ending date of the policy. This will allow individuals to purchase LRP insurance on cattle for which they bear price risk but are still at the location of the seller. This will be attractive to margin operators that purchase cattle via forward contract (or purchase agreement) to be

sold later as feeders or fed cattle. There is also potential benefit to the seller of the forward priced cattle as the ability to utilize LRP sooner may impact buyer interest.

Unborn Calves and Cull Dairy Cows
Two new coverage types were added for which LRP coverage can be purchased. A type was added for "unborn calves" intended to be sold within two weeks of birth. Both beef and beef-on-dairy cross calves can be covered, and unborn calves have a target weight range of 60-99 lbs. Full dairy calves must still be covered under the unborn, predominantly dairy type. Calves covered as "unborn calves" must be sold within 30 days (before or after) the SCE (Specific Coverage Endorsement) ending date. While beef calves are included, this category is largely intended for beef-on-dairy cross calves as they are often sold at a very young age and have values that differ substantially from full dairy calves. A new type was also added for cull dairy cows, which can be used to protect the value of dairy cows that are being removed from the herd and entering the beef system.

Drought Hardship Exemption
Currently, feeder cattle may not be sold any earlier than 60 days prior to the ending date of the LRP SCE for an indemnity to be received. For the 2026 reinsurance year, a drought hardship exemption has been added that will allow producers to keep coverage on cattle sold more than 60 days before the ending date of the SCE if the covered cattle are in a county experiencing a drought and drought conditions worsen after entering the SCE.

Drought conditions are quantified using the Drought Severity and Coverage Index (DSCI), which is based on US Drought Monitor (USDM) data. There are 6 drought levels estimated weekly to quantify how severe drought conditions are in each area – none, Abnormally Dry (D0), Moderate (D1), Severe (D2), Extreme (D3), and Exceptional (D4). DSCI is a weighted summation of the percentage of a county in each designation multiplied by a weight factor that assigns a higher number to more severe drought as follows: DSCI = (1 x %D0) + (2 x %D1) + (3 x %D2) + (4 x %D3) + (5 x %D4). For example, if the entire area were in Exceptional drought, the associated DSCI would be 500 (100% x 5). If half of the area were in D5 and half were in D4, the associated DSCI would be 450 ((50% x 5) + (50% x 4)). To be eligible for the drought hardship exemption, the DSCI must exceed 200 and must have increased by 150 since the effective date of the LRP policy.

Prohibition of Subsidy Capture
Language is now included that specifically states that activity intended to financially gain from the capture of premium subsidy is considered abuse of the program. Insureds are required to provide brokerage records if requested by RMA to determine if abuse occurred. There is also language that describes practices that are presumed to be subsidy capture. Examples of this would include selling a put option very close to the effective date of an LRP SCE that also expires very close to the ending date of that SCE at a premium of more than 80% of the SCE premium. Similar language is also included for creating a short synthetic put by buying futures and selling a call option.

While there is very specific language on what would be presumed to be subsidy capture, it will have virtually no impact on those employing normal risk management strategies. For example, if a producer wanted to use LRP as the lower end of a fence and write an out-of-the-money call option to offset some of the premium cost, they can still do so. And if a producer purchased LRP but saw the market swing much higher over the next couple of months, they could purchase a put option to re-establish a higher

price floor. The subsidy capture language is just intended to eliminate abuse of the program and ensure that LRP is being used as a true risk management tool.

Livestock Risk Protection insurance continues to evolve as a risk management tool for livestock producers. The purpose of this article was to focus on some of the more significant changes to LRP for the 2026 reinsurance year. There were some other changes that were not discussed and many specifics that were not covered. Readers are encouraged to engage with an insurance professional for more specific information and guidance. Most importantly, producers should give careful consideration to risk management strategies and whatever tools they feel are most appropriate for their operation.

Kentucky Beef Network Improves Operations by Going Back to Basics

Katie Pratt, Kentucky Cattlemen's Association

LEXINGTON, KY− For Webster County producer, Russell Bell, the Back to Basics Program has helped put his operation on the right track. Prior to the program, the full-time farmer was calving year-round, had a limited forage plan, few water options and a loose vaccination protocol.

Bell's operation has completely transformed in the 1.5 years he has been in the program.

"There are things that we have done that we either would not have done on our own or would not have done so soon," Bell said who raises around 120 mama cows and has a custom baling operation with his wife Angelan.

The Back to Basics Program began in 2023 as part of the grant the Kentucky Beef Network and the University of Kentucky Beef IRM Team received from the Kentucky Agricultural Development Fund. The Back to Basics program is designed to help producers incorporate modern production practices into their operations.

Willing participants

Les Anderson, UK beef extension specialist, heads up the program. He worked with county extension agents and field associates to find farmers willing to participate. Nine farmers from across Kentucky are enrolled in the two-year program.

Bell was an ideal choice because he had already sought out the advice of his county extension agent Vicki Shadrick and was willing to make changes.

"We wanted to find producers who would follow through with our recommendations for their operation and stay for the entirety of the program," Anderson said. "We also wanted to make sure each farm in the program had a unique situation."

Holistic Improvements

In the program, Anderson along with a number of other UK extension specialists in beef cattle production and forages, visit each of the farms to offer ways producers could improve their many aspects of their operations.

For Bell's operation, that included farm visits from Chris Teutsch, UK extension forage specialist, Katie VanValin and Kevin Laurent, UK beef extension specialist, Maggie Ginn, UK extension associate, and Ben Lloyd, KBN field associate. They offered him ideas to improve his operation.

"All of the farms in the program have gone through a massive reorganization and are using record keeping systems Stocket and Beef System Analyzer to tract their progress," Anderson said.

Today, Bell is artificially inseminating every cow and moving toward fall calving and spring calving herds. He is using sex-sorted semen in his AI program to produce as many steer calves as possible. He is also better managing his pastures, rotationally grazing his cattle and has worked to improve soil fertility.

"We weren't soil testing anything before," Bell said. "Now, we are making all the improvements that we can afford to make based on our soil test results. We are also experimenting with clover and crabgrass."

He is also weaning and backgrounding his calves. They are vaccinated and on feed for at least 90 days before they are sold.

"Before I was selling unweaned calves for someone else to deal with," he said. "This program has shown me how backgrounding, having a vaccination plan and weaning prior to taking the animals to sale barn can really help my bottom line."

Finding solutions

Dale Gold, farms with his wife Cheryl, his uncle Bob Gold and Bob's wife Pat in Marshall County. He was initially referred to the program by Nicole Rhein, Marshall County extension agent, due to a persistent pinkeye problem in his herd. Gold worked with Anderson, Laurent, Ginn and local veterinarian Dr. Caleb Jenkin. Jenkin created a vaccine that was tailored to Gold's operation to reduce the occurrence of pinkeye. In the process, Gold also filled in an old, shallow pond that may have contributed to his fly problem with a grant from the Natural Resources Conservation Service and transitioned his cattle to self-waterers.

"We had a rough three years with pinkeye before this program," Gold said. "Last year, we only had two cases."

Taking it up a notch

While addressing the pinkeye issue, UK specialists talked with Gold about his goals for the operation. He has a registered herd of around 25 head of Angus cows and was looking to expand and improve his genetics. Gold was already artificially inseminating his herd and following it up with a clean-up bull. Anderson suggested he add a chute-side pregnancy blood test and ultrasound after the first AI round and follow it up with a second round of AI on the open animals before using a clean-up bull.

"Dale is a great example of a producer who was already doing a good job but decided to take his management to the next level," Anderson said.

Gold said he likes the chute-side pregnancy blood test because it is easy to use and quickly provides results. His conception rates have increased due to the added tests and AI round.

"In the first year, we nearly doubled my herd's conception rate by adding the second round of AI," Gold said. "We went from conception rates in the upper 50% to low 60s to now 80 to 90%."
Gold also improved his record keeping and is using it to determine which cows to use AI sex-sorted semen to produce his desired heifers to retain in the operation.
"In keeping records, I found that my top 10-12 cows got bred by AI on the first pass," Gold said. "I'm using sex-sorted semen when I breed those so I can keep their heifer calves to expand my herd."

Gold, who is the currently president of the Calloway County Cattlemen's Association, has worked with UK to offer field days for other area producers about the production practices he has implemented. In addition, he is assisting neighboring farmers as they add some of the same production practices to their operations.

"Even though they are not involved in the program, there is value to other producers seeing and learning about what we are doing," he said.

How do you select your bulls?

Dr. Darrh Bullock, University of Kenntucky, Dr. Matt Sprangler, Unviersity of Nebraska

Bull selection is one of the most important decisions that a beef producer makes and can have a lasting impact on profitability. Factors such as the market endpoint of calves (e.g., newly weaned or finished cattle), whether replacements will be retained, and the level of nutritional management provided to the cow herd all impact which traits should be selected for and at what level. Understanding this complex relationship can be the difference between buying a "good" bull and buying the right bull.

The eBEEF.org team, a group of beef cattle geneticists from across the US, is trying to determine how beef producers are currently selecting their bulls and will use this information to develop educational materials to help improve this process. Knowing which traits to select for is often not the problem, it is the degree to which each should be emphasized that can be highly variable from producer to producer and can often be challenging to determine. Too often this process is more 'seat of the pants' rather than by factors affecting profitability. For example, we may give calving ease too much emphasis, which can cause us to lose potential income with lighter sale weights so getting the proper balance is important.

To assess how beef producers are selecting bulls, within their level of management, we are asking you to fill out a brief survey. This should take approximately 10 minutes of your time and provide a wealth of information for the beef industry! This information will be used to compare the survey results to values generated by iGENDEC, a software package that determines the most profitable level of emphasis that should be placed on each trait within a specific production system.

Several incentives are being offered to encourage participation in this survey. The first is a random drawing for five $100 gift cards generously donated by the Beef Improvement Federation (beefimprovement.org). The second is a special webinar that will be offered to everyone that completes a survey, and provides their email address, to discuss the findings of the survey and resulting bull selection strategies. Lastly, and possibly most importantly, knowledge gained by beef producers by going through this process and the entire beef industry through better bull selection decisions.

The UK Beef Extension Team is a major partner in this national effort and we hope that we will get a good response from our Kentucky beef producers. We will be developing follow-up articles with both national and Kentucky results, so the more responses we get the better the information will be. Thank you for your help!

Survey Link: https://corexmsd9bfwdhxgbhmw.qualtrics.com/jfe/form/SV_eFqYgoQpZMJLRLE

FAQs: What Producers Should Know About Rabies in Cattle.

Dr. Michelle Arnold, Ruminant Extension Veterinarian

This year, the number of skunks diagnosed with rabies in Kentucky is already unusually high, especially in the Blue Grass area of central Kentucky (Figure 1). With that fact in mind, now is a good time to review rabies in cattle and what to do in the event of human exposure.

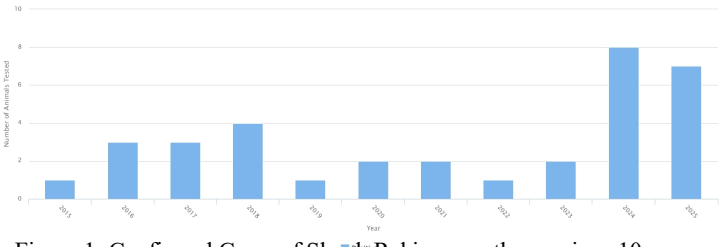

Figure 1: Confirmed Cases of Skunk Rabies over the previous 10-year period. Chart courtesy of UKVDL Epidemiology, Dr. Jackie Smith

Do cattle get rabies? Yes, all species of livestock are susceptible to rabies although cattle and horses are the most frequently reported infected livestock species. Rabies is caused by a virus that affects the nervous system and is transmitted by the saliva of an infected animal, usually via a bite or by infected saliva coming in contact with mucous membranes (eyes, nose, or mouth) or an opening in the skin. The virus then travels by peripheral nerves to the brain, so the incubation period (time from infection until symptoms develop) varies depending on the site of injury. In other words, the further the bite is from the brain, the longer it takes the virus to travel that distance before the animal shows symptoms of disease. However, once the virus reaches the brain, it causes encephalitis with rapid progression of the disease over the course of a few days, culminating in death.

How do Kentucky cattle get exposed? Rabies is uncommon in cattle but there are times when cases in wildlife increase and that presents more opportunities for cattle exposure. In Kentucky, rabies is typically transmitted through the bite of an infected skunk; the closer the bite is to the head of the cow, the shorter the incubation period. Unfortunately, cattle are very curious and will often sniff or lick an animal acting unusually (for example, a skunk wandering around midday), resulting in a bite on the nose. Which wild animals are most likely to transmit rabies and how can

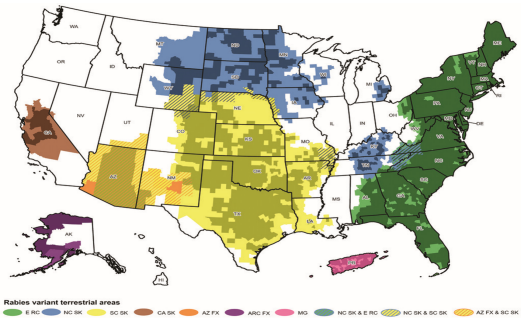

Figure 2: Distribution of major rabies virus variants (RVVs) in the US, including Puerto Rico, from 2016 through 2020. Darker shading indicates counties with confirmed animal rabies cases in the past 5 years.

infected wild animals be recognized? Bats, raccoons, skunks, foxes and coyotes are the most common carriers of rabies, but different areas of the country will have a predominant form that causes most of the cases (see Figure 2). Skunks form the primary reservoir through the north central United States extending down through Texas and east to Arizona, including KY. In general, rabies should be suspected in wildlife acting abnormally. Rabid raccoons, foxes, and skunks typically show no fear of humans and are ataxic (wobbly), frequently aggressive, and they are active during the day rather than around twilight as usual. In urban and suburban areas, rabid foxes and coyotes can enter yards and attack dogs and humans. Rabid bats can be observed flying in the daytime; resting on the ground, paralyzed and unable to fly; attacking humans or other animals; or fighting other bats.

How long after a bite does it take for a cow to develop symptoms of disease? Generally, the incubation period from the time of the bite until the development of symptoms is 1-2 months but can be as short as 2 weeks. Death occurs within 3-4 days of showing symptoms of disease.

What are the clinical signs (symptoms) in cattle? The initial signs are non-specific and can make diagnosing rabies challenging. There are two common forms seen in livestock, the “paralytic” form and the “furious” form, although an individual animal can exhibit symptoms of both forms. Paralytic rabies is characterized by a progressive ataxia (incoordination, wobbly gait) that eventually leads to paralysis. Cattle often demonstrate knuckling of the fetlocks, a swaying or unsteady gait, and a flaccid tail. Drooling may be observed because of progressive pharyngeal paralysis causing an inability to swallow. Vocalization may be altered, or the animal may attempt to bellow but make no sound so it may appear to be yawning. Coma and death generally occur within 1 to 2 days after the animal goes down (recumbency). Death is due to respiratory failure. Furious rabies is characterized by altered mentation, hyperexcitability, and the animal may respond excessively or aggressively to external stimuli such as sound, light, movement, or touch. Loud bellowing vocalization may be demonstrated. Bulls often show increased sexual excitement and are observed to mount inanimate objects. Cattle with furious rabies can be dangerous, attacking and pursuing humans and other animals. Lactation ceases abruptly in dairy cattle. Some cattle show marked straining (tenesmus) when trying to urinate or defecate. Clinical signs progress to paralysis, recumbency, coma, and death. Regardless of form, rabies should be on the list of possibilities for cattle that exhibit abnormal behavior, an inability to swallow or choke, hypersalivation (slobbering), and neurologic abnormalities.

What other diseases look like rabies in cattle? In the early stages, rabies can easily be confused with other diseases or with individual aggressive cattle behavior. More importantly, rabies may be overlooked in areas where the disease is uncommon. Rabies should always be considered as a possible diagnosis for symptoms related to the brain and spinal cord (central nervous system). Clinical findings may be similar to a number of other diseases including bacterial meningitis, brain abscess, listeriosis, botulism, Aujeszky’s disease (pseudorabies), hypomagnesemia (grass tetany), nervous ketosis, and the brain form of *Histophilus somni*.

How can a person become infected by a rabid cow? The rabies virus is found in saliva and nervous tissue (brain, spinal cord, nerves). Cattle can shed rabies virus in their saliva and can potentially infect other animals and humans. Generally, the first thing noticed by producers is the animal appears to be choking which prompts owners, and veterinarians, to insert a hand into the mouth in an attempt to identify and remove a foreign object. Anyone examining a suspect rabid animal or when collecting/handling specimens should wear personal protective equipment (PPE). PPE should include

disposable gloves and goggles or mask to prevent infected saliva or nervous tissue from contacting mucous membranes and/or any open cuts on skin.

What do I do if I think I am exposed to rabies? If you are exposed, immediately wash the wound or cut with soap and water. If saliva comes into contact with mucous membranes, immediately flush the area with fresh clean water. Consult your healthcare provider for bite wound management which should include appropriate antibiotic therapy, a tetanus immunization (if not current), and an evaluation for rabies "post-exposure prophylaxis". For unvaccinated people after rabies exposure, the complete post-exposure treatment consists of administration of rabies immunoglobulin at the site of the bite and a series of rabies vaccinations (Figure 3). The Kentucky Department for Public Health, specifically the State Public Health Veterinarian, can provide recommendations for post-exposure prophylaxis to veterinarians and healthcare providers.

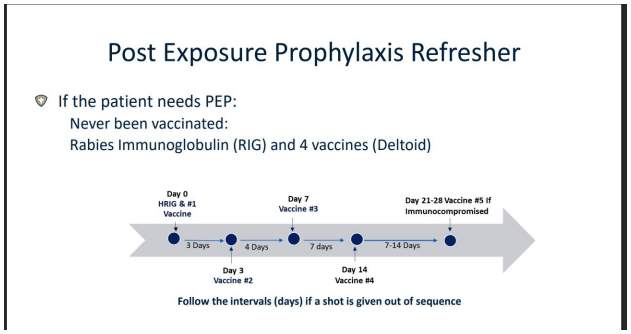

Figure 3: "Rabies shots" given to humans after exposure to a rabid animal. From: Rabies PEP Refresher: When & How; Kelly Giesbrecht, DVM, MPH, Hon. Dipl. AVES State Public Health Veterinarian

How is rabies diagnosed in cattle? When rabies is suspected, the brain tissue of a rabies suspect animal is examined for the presence of rabies infection at the Division of Laboratory Service in the KY Department for Public Health. No definitive test is available for rabies diagnosis in a live animal. Typically, the suspect animal is euthanized and the head removed for shipment to the laboratory. If at all possible, animals should be euthanized by lethal injection of pentobarbital or another approved euthanasia solution. The use of a captive bolt gun or a gunshot to the head can result in excessive tissue trauma that can interfere with an accurate diagnosis. In addition, these methods potentially increase the risk of rabies virus exposure to personnel when removing the brain. The entire carcass, entire head, or the removed brain can be submitted for testing. The euthanasia method should ensure that the brain is not damaged, and the brainstem is included.

What happens if an animal tests positive? The local health department will conduct an investigation to identify the people and animals that were potentially exposed to the rabid animal and provide recommendations for rabies post-exposure prophylaxis for people. The Kentucky Department of Agriculture (KDA) is responsible for quarantine and case management of livestock suspected of rabies exposure. If a rabid cow is nursing a calf, the calf is considered exposed to rabies. If a nursing calf is rabid, the cow is considered exposed to rabies. KDA will base decisions for case management on current scientific research and available evidence.

Is there a rabies vaccine for cattle? Yes. Rabies vaccination is recommended for valuable stock, show cattle, or for livestock that has frequent contact with the public. If exposed to the rabies virus, livestock that are current on rabies vaccination with a USDA-licensed vaccine approved for that species should be given a booster vaccination immediately and observed for 45 days. Unvaccinated livestock should be euthanized or kept under strict quarantine for 4 - 6 months after a rabies exposure. Unvaccinated

livestock with a high-risk exposure to rabies should not be sold and products from these animals (meat, milk) should not be consumed during this quarantine period.

Is it safe to eat meat or drink milk from an infected animal? Neither milk nor meat should be consumed from an animal showing symptoms of rabies since virus can be present in the tissues and milk of rabid cattle. However, pasteurization and cooking will inactivate rabies virus so drinking pasteurized milk or eating thoroughly cooked animal products is not considered a true rabies exposure. Cattle exposed to rabies cannot be processed at a USDA facility; however, they may be custom slaughtered. If custom or home slaughtered for consumption (not recommended), the animal should be slaughtered immediately after exposure, and all tissues should be cooked thoroughly. Handling and consumption of uncooked tissues from exposed animals also carries a dangerous risk for rabies transmission. People handling exposed animals, carcasses, and tissues should always use appropriate personal protection.

What you need to know

- Rabies should be on the possible diagnosis list for any cattle showing signs of abnormal behavior, inability to swallow, and central nervous system abnormalities.
- Rabies virus is shed in saliva: wear personal protective equipment (gloves, goggles, mask) during physical examination, necropsy, and when collecting specimens.
- Cattle are considered exposed to rabies if:
    - A calf is exposed if nursing a rabid cow;
    - A cow is exposed if nursed by a rabid calf;
    - A cow is exposed if bitten by a rabid animal;
- Rabies in animals is reportable to the KY Department of Public Health in Frankfort. The Kentucky Department for Public Health, specifically the State Public Health Veterinarian, can provide recommendations for post-exposure prophylaxis (shots).
- Fresh, intact brain is needed for the rabies diagnostic test.
- See https://vdl.uky.edu/epidemiology for a full range of Rabies maps in KY by date, county, or species affected.

One Health: What is it & What Does it Mean for Me?

Dr.Jeff Lehmkuhler, PhD., PAS, Department of Animal & Food Sciences University of Kentucky

Our Animal & Food Sciences department is undergoing a strategic planning process at the time I write this. As part of the process, I have been tasked with conducting interviews with stakeholders and gathering input. Questions were provided that were developed by an external consulting firm along with the strategic planning committee which I serve on with others. One of the questions asked is if interviewees are familiar with UK's One Health initiative. Some stakeholders were informed about One Health and others were not. I'll be honest, I am not 100% "in the know" of the UK One Health initiative. Additionally, while at a professional meeting in Texas a few months back I had breakfast with a

colleague. He has long been an advocate of red meat as a part of a healthy diet for humans, and this led to a discussion on the One Health topic. I found the discussion interesting and wanted to share that information with you. This will not be all encompassing but rather provide some background.
When you do an internet search for One Health, I think you will be amazed at how wide stretching the One Health concept is rooted. Verbiage can be found in the World Health Organization (WHO), U.S. Center for Disease Control (CDC), U.S. Food & Drug, United States Department of Agriculture including Food Safety Inspection Services (USDA FSIS) and Animal & Plant Health Inspection Service (USDA APHIS) and other government agencies. My point is that although you may have heard about the UK One Health initiative through grapevine and thought it was something UK started, it is not, and actually other universities have similar initiatives. In fact, it was a bit frustrating that The University of Tennessee One Health Initiative site came up on the first page of my search and not UKs.

As I was reading through a background piece from USDA APHIS, the article stated that the concept of One Health dated back to the 1800's. The article quoted a German scholar by the name of Rudolf Virchow who said "Between animal and human medicine there is no dividing line – nor should there be. The object is different, but the experience obtained constitutes the basis of all medicine". A common thread across pieces of literature is the impact of zoonotic diseases (diseases that can be spread from animals to humans) on human health. A publication from the CDC states that more than half of the infections humans contract are spread by animals while the above-mentioned APHIS article stated that over the last 30 years more than 75% of emerging infectious diseases in humans have been zoonotic.

The formation of the One Health Initiative task force occurred in 2007 through the joint efforts of the American Veterinary Medical Association (AVMA) and the American Medical Association (AMA). Shortly after this initiative, the Food and Agricultural Organization (FAO) of the United Nations, the World Organization for Animal Health (OIE), WHO, the United Nations Children's Fund (UNICEF), the World Bank and the United Nations Systems Influenza Coordination (UNSIC) prepared the document titled "Contributing to One World, One Health™- A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystems Interface". Since then, several health organizations have come together for various conferences and meetings revolving around the One Health platform. It was in 2009 the CDC established its One Health office followed in 2012 by USDA APHIS forming the One Health Coordination Center. My point in sharing this background is to inform you that the concept of One Health is not new and not just at UK.

The CDC materials share their outreach efforts. Opportunities to educate rural youth in 4-H and Future Farmers of America (FFA) about the spread of diseases between animals and humans are being approached by the CDC One Health Office. Rapid response teams for disease outbreaks such as those that attend fairs in which infected swine were being exhibited is an example shared by CDC. A lot of effort is being placed on education around zoonoses to reduce the risk of disease transmission. The USDA lists examples of domestic and global challenges that involve a One Health approach and include: antimicrobial resistance, swine influenza, and other similar issues.

So, what does this mean for you? As the University of Kentucky College of Agricultural, Food and Environment works with other colleges on campus to support the UK One Health initiative, you will likely see new educational materials. Much of what we do in animal agriculture exposes us to a variety of pathogens with some being zoonotic. Examples may include diseases such as alpha-gal, Lyme's,

theileria, leptospirosis, internal parasites, and others. A few things we all can do to reduce the risk of contracting an infectious disease when working with animals include:

1) Wear gloves when processing/working livestock and assisting during dystocia
2) Consider wearing eye protection if you don't wear prescription glasses
3) Change cloths once you leave the farm or have a "mud" room as you enter your living quarters to leave soiled clothing for washing
4) Use disinfectants on equipment and boots as this part of a biosecurity plan
5) Keep food and drinks out of the processing facility
6) Educate yourself, family and workers about disease threats / risks
7) Manage deadstock appropriately by taking animals to a diagnostic lab, composting or other proper dead animal disposal methods
8) Checking our house pets for external parasites
9) Use a single needle per animal on breeding stock to reduce risk of transmission of blood-borne pathogens
10) Provide livestock a plane of nutrition and preventative herd health protocols to maintain a high level of immunity

Hopefully, you have a greater appreciation of how wide-reaching the One Health effort is and a bit of background on how it began. Be on the lookout for more information from the UK One Health initiative. Continue implementing sound biosecurity practices on your farm and reduce your risk of disease introduction. For more information, contact your local county Extension office.