ANIMAL SERVICES NEWS

Arizona Department of Agriculture - ASD Newsletter March 2019

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Biosecurity for Egg Producers

by Roland Mader, Dairy/Egg Manager

Biosecurity is an important factor in being an egg producer and healthy chickens are a critical part in the production of eggs. USDA has a lot of information about how to protect your flock from any disease. https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian

Keeping birds safe from infectious disease is a top priority and responsibility for all owners, growers, workers, and enthusiasts involved in raising poultry. Disease outbreaks lead to devastation of our flocks and result in job and financial losses, quarantines limiting trade, and affecting prices on eggs, prepared poultry, and other staples.

Biosecurity refers to everything that's done to keep diseases and the pathogens that carry them – viruses, bacteria, funguses, parasites and other microorganisms – away from birds, property, and people. This includes:

- Structural biosecurity: measures used in the physical construction and maintenance of coops, pens, poultry houses, family farms, commercial farms, and other facilities.
- Operational biosecurity: practices, procedures, policies that are consistently followed by people.

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Biosecurity for Egg Producers *continued from page 1*

Here are the basics:

Keep visitors to a minimum. Only allow people who care for your poultry to come in contact with your birds, this includes family and friends. Keep track of everyone who is on your property at all times. Make sure everyone who does have contact with your flock follows biosecurity principles.

Wash your hands before and after coming in contact with live poultry. In addition to potentially spreading disease from farm to farm or bird to bird, you can also spread germs such as Salmonella that can impact human health. Washing your hands with soap and water should always be your first choice. If using a hand sanitizer, remove manure, feathers, and other materials first because disinfectants will not penetrate organic matter or caked-on dirt.

Provide disposable boot covers (preferred) and/or disinfectant footbaths for anyone having contact with your flock. If using a footbath, be sure to remove all droppings, mud or debris from boots and shoes using a long-handled scrub brush BEFORE stepping into the disinfectant footbath and always keep it clean.

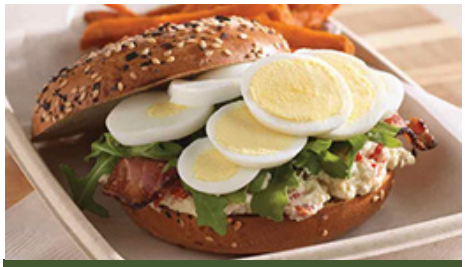
Change clothes before entering the poultry areas and before exiting the property.

Visitors should wear protective outer garments or disposable coveralls, boots and headgear when handling birds, and shower and/or change clothes when leaving the facility.

Clean and disinfect any tools or equipment before moving them to a new poultry facility. Before allowing service vehicles, trucks, tractors or tools and equipment - including egg flats and cases that have come in contact with birds or their droppings - to exit the property, make sure they are cleaned and disinfected to prevent contaminated equipment from transporting disease. Items that cannot be cleaned and disinfected - such as cardboard egg flats - must not be moved or reused.

Look for signs of illness. Know the warning signs of infectious bird diseases.

Report sick birds. Don't wait. If your birds are sick or dying, call a local veterinarian, cooperative extension service, or State Veterinarian. USDA can be reached toll-free at 1-866-536-7593.



HARD-BOILED EGG AND BLUE PIMIENTO CHEESE
Yield: 12 servings

Ingredients for Blue Pimento Cheese
- 8 oz. aged white cheddar cheese, shredded
- 1/2 cup mayonnaise
- 1 tsp. Worcestershire sauce
- 1 clove garlic, minced
- 1 tbsp. minced shallots
- 1/4 tsp. white pepper
- 8 oz. Gorgonzola cheese, crumbled
- 1/3 cup red peppers, diced and roasted

Directions for Blue Pimento Cheese
1. Combine cheddar, mayonnaise, Worcestershire sauce, garlic, shallots and pepper in a mixer and whip until well combined and fairly smooth (about 2 minutes).
2. Slowly stir in the Gorgonzola and roasted red peppers and mix just until combined.
3. The cheese spread will be chunky. Chill.

Additional Ingredients
- 12 slices peppered bacon, thick cut
- 12 hard-bolied eggs, peeled and sliced
- 3 cups baby arugula
- 12 whole-grain bagels
- Preparation

Preperation & Assembly

1. Preheat oven to 350° F.
2. Place strips of peppered bacon on parchment-lined baking sheet.
3. Bake until bacon is crisp and browned, about 15 – 18 minutes.
4. Cut in half and keep warm.
5. Toast bagel.
6. Cover bottom half of bagel with 3 tablespoons blue pimento cheese, then top with 2 half slices of bacon, ¼ cup baby arugula and a sliced, hard-cooked egg.
7. Cover with toasted bagel top.
8. Serve immediately.

Note: Do not allow raw or cooked eggs to remain at room temperature for longer than one hour (including preparation and service time).

Rabies Detection for Livestock Owners

by Dr. Peter Mundschenk, State Veterinarian

Precautions

Rabies is an always fatal disease!

Rabies infections are not uncommon in other parts of the world. Most people in other parts of the world who get infected with rabies have been bitten by an infected animal. Getting the infected saliva from an infected animal into an open wound or mucous membrane of eyes, nose, or mouth can also lead to infection. Rabies is not spread by contact with feces, blood, or urine.

Therefore wearing gloves and preferably double-gloving is imperative in situations involving possible rabies exposure. Whether there is a need for other equipment is dependent on the task/s being performed. In most situations for field staff, gloves should suffice.

Remember: The goal is to not allow the virus (primarily from the infected animal's saliva) to come into contact with skin, eyes, or mucous membranes. Skin which looks intact generally has multiple microscopic abrasions that the virus can use to enter the body.

Effective vaccines are available for livestock. Please discuss the matter with your private veterinarian.

General Disease Information

Behavior and Situational Awareness

Many livestock rabies exposure cases occur because of the natural curiosity of the livestock involved.

Scenario

- A rabid skunk becomes debilitated and disoriented then it wanders around in a lot, pasture, or section of range with livestock within sight or hearing.
- Some of the livestock will run away. However, some will actually come to investigate the occurrence. (How many times have you seen a group of heifers run over and try to sniff the barn cat when it wanders through the lot? It's a process of natural curiosity.)
- And how do they investigate? It's usually with their noses stuck down on top of that rabid skunk!
- So if the skunk bites, the odds are good it will bite the curious critter (cow, goat, let's use horse for the remainder of this scenario) somewhere on that horse's nose or muzzle.
- Then because of the location of the bite wound (close to significant nerves and nearer the brain) transmission of the virus will be effective and fairly quickly infective.

Clinical Signs

Please note not all signs will be displayed by all animals.

Cattle

- Excessive salivation (100%)
- Behavioral change (100%) (especially sudden onset)

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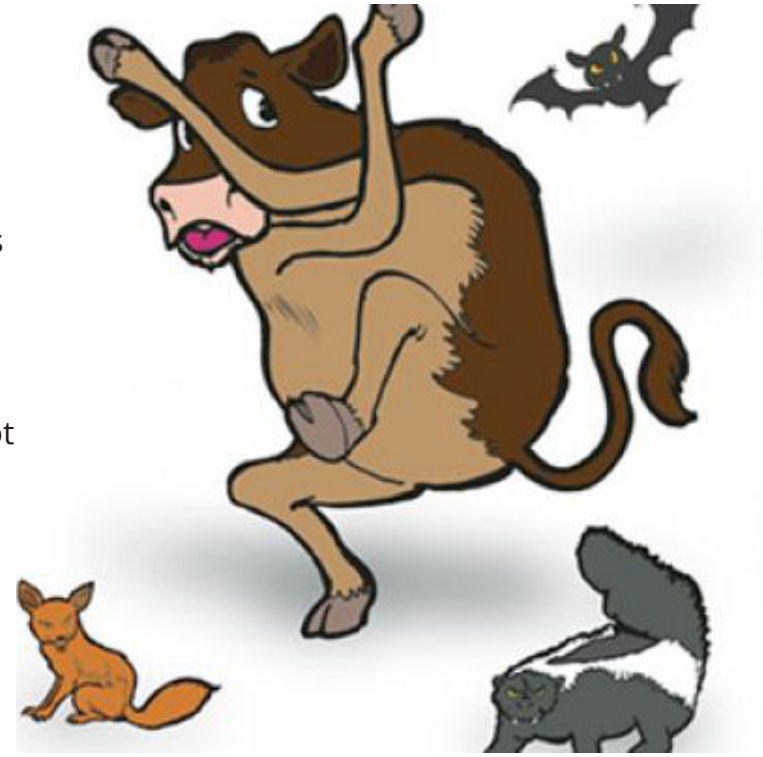
Rabies Detection for Livestock Owners *continued from page 3*

- Muzzle Tremors (80%)
- Bellowing aka "Vocalization" (70%)
- Aggression, Hyper-aesthesia (extra sensitive) and/or Hyper-excitability (70%)
- Pharyngeal Paresis (weakness)/Paralysis (60%) [Cattle with rabies are often presented for "choke" or related problems with chewing or swallowing.]
- Furious Form (as opposed to Dumb Form) was seen in 70% of the cattle (Old terminology - Dumb Form name derived from animal standing there as if it does not know that it's alive and in its surroundings and/or acting as if blind.)



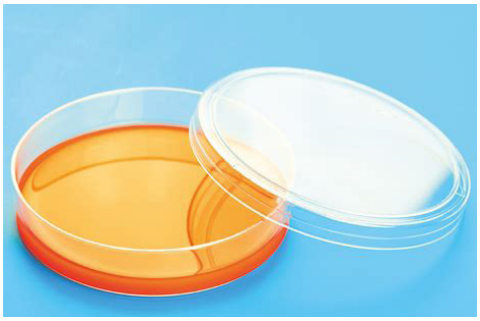
Sheep (consider Goats to appear similarly)
- Muzzle and/or Head Tremors (80%)
- Aggressiveness, Hyper-excitability (extra sensitive), and/or Hyper-aesthesia (80%)
- Trismus (60%) [think of this as "lock jaw with spasms"]
- Salivation (60%)
- Vocalization (60%)
- Recumbency aka "Downer" (40%)
- Furious Form (as opposed to Dumb Form) was seen in 80% of the sheep (Old terminology - Dumb Form name derived from animal standing there as if it does not know that is alive and in its surroundings and/or acting as if blind.)

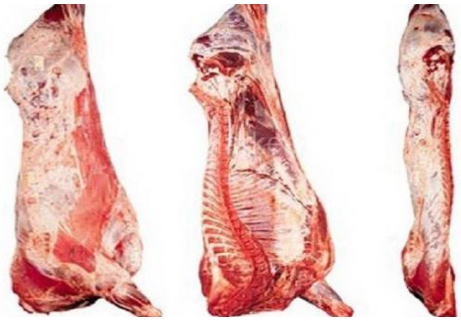
Horses
- Sudden Behavioral Changes
  - Initially Dull and Depressed, Loss of Appetite
  - Can be Aggressive and Violent
- ADR ("Ain't Doin' Right") may initially be confused with mild-to-moderate colic
- Low-grade Fever
- Lameness, Wobbly and/or In-coordination
  - often rabies in a horse starts with a progressive rear limb lameness - "off in the rear"
- Swallowing Problems (can sometimes look like choke) and Drooling
- Progresses to Being "Downer" in 5-7 Days

Swine (very rare in swine due to most being housed indoors)
- Excitement/Aggression
- In-coordination
- Excessive Salivation/Drooling
- Depression/Convulsions/Down

Where Does Meat Come From?

by Rick Mann, MPI Manager





As Department employees we have a fairly good idea when asked the age old question "Where Does Meat Come From?" We all know animals are born on farms or ranches and raised to a market weight then delivered to a slaughter facility where they eventually end up on our dinner table. We've all had a little chuckle when the response received from some folks is that it comes from the grocery store where no animals were harmed in making it. It now seems we may have judged that statement a little prematurely.

There are now individuals moving toward producing lab-created meat or cultured meat in the USA. These meats are made from taking samples from living animals and growing them in laboratories to produce the cultured meats. These cultured meats are claimed to be healthier than conventional meat and more environmentally friendly. Proponents say that cultured meat may help alleviate the environmental and health challenges posed by the world's growing appetite for conventional meat. In some aspects lab-grown meat might be better for us due to the fact cultured meats are produced in a sterile environment so in theory would be free of harmful pathogens.

The first lab-grown meat was show cased to the public at a cost of $330,000 per pound, a little too much for most consumers to shell out. The current goal is to produce a hamburger patty for the consumer at a cost of $1 or about $3.20 per pound. Those who have tasted these products say they barely differ from the real thing, but you and I will have to verify that for ourselves. At any rate, those producing these cultured meats claim, that within the next few years lab-produced meats will start appearing in your neighborhood supermarkets and restaurants.

Many hurdles must still be overcome prior to cultured meat appearing at your local market including FDA granting approval as a human food source, but at some point we may have to rethink our answer when asked "Where does meat come from?"

Did you know that there are thousands of cheese varieties produced all over the world? With all of those options, the world is your cheese! Check out this link to learn more about the different types of cheese and how to serve them. https://www.ourchees-es.com/all-about-cheese/cate-gories

Contact Us

Dairy:
(602) 542-4189

Dispatch:
(623) 445-0281

Egg:
(602) 542-0884

Licensing:
(602) 542-3578

Meat & Poultry:
(602) 542-6398

Self-Inspection:
(602) 542-6407

State Vet's Office:
(602) 542-4293