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West Nile Virus

by State Vet's Office

Thus far for calendar year 2020, we have had three cases on West Nile Virus (WNV) confirmed in horses; one in Maricopa county, one in Pinal County and one in Yavapai County. WNV is primarily transmitted by mosquitoes which are most active at dusk and dawn, and breed in shaded areas with stagnant water. Once a horse or human is infected with WNV virus, there is approximately a 5-15 day incubation period before clinical signs of the disease appears. Clinical signs include fever, lethargy, neurologic signs which can include some or all of the following signs; stumbling, falling, weakness, paralysis, tremors, hyper-reactivity, and loss of control over urinary function, vision or difficulty in swallowing. The course of disease and the outcome depend on the vaccination status of the animal and individual susceptibility to the disease.

The key to control of WNV is a two-pronged approach:

Firstly, there are a number of safe, clinically efficacious vaccines available on the market. All horses in our reported cases had no recent vaccination history for WNV. Modern WNV vaccines are safe, efficacious and produce minimal side effects which may include a little muscle soreness in the vaccination site, and lethargy or being "off" for a couple of days. This is no different than what happens to individuals when they get an annual flu vaccine. These side effects are of much less consequence than the repercussions of not vaccinating and having your horse get sick with WNV. WNV infection can be fatal or produce permanent neurologic deficits making your horse unsafe to ride.

The second aspect to controlling WNV is mosquito control as they transmit the disease when biting the animal. Eliminating sources of standing water to prevent breeding grounds for mosquitoes from forming is crucial. From a management standpoint, applying fly sprays and turning your horses out during periods when mosquito activity is minimal during the day (mosquitoes are most active at dusk and

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ASD Employee Spotlight

My name is Oliver Krivak. I was born in a town called Zenica (Bosnia and Herzegovina) and later moved to Serbia due to the war (1990-1995). I came to the United States in 2002 and obtained citizenship in 2008. I'm 41 years old and the father of two beautiful girls, Elena 11, and Talija 4. My free time is spent with my daughters. We love kayaking, camping, and everything about nature. My hobby is mountain biking.

I have been a State employee since May 2006. I spent almost 7 years with the State Laboratory. After that, I was hired in the Egg Program and that's where I am today as a Public Health

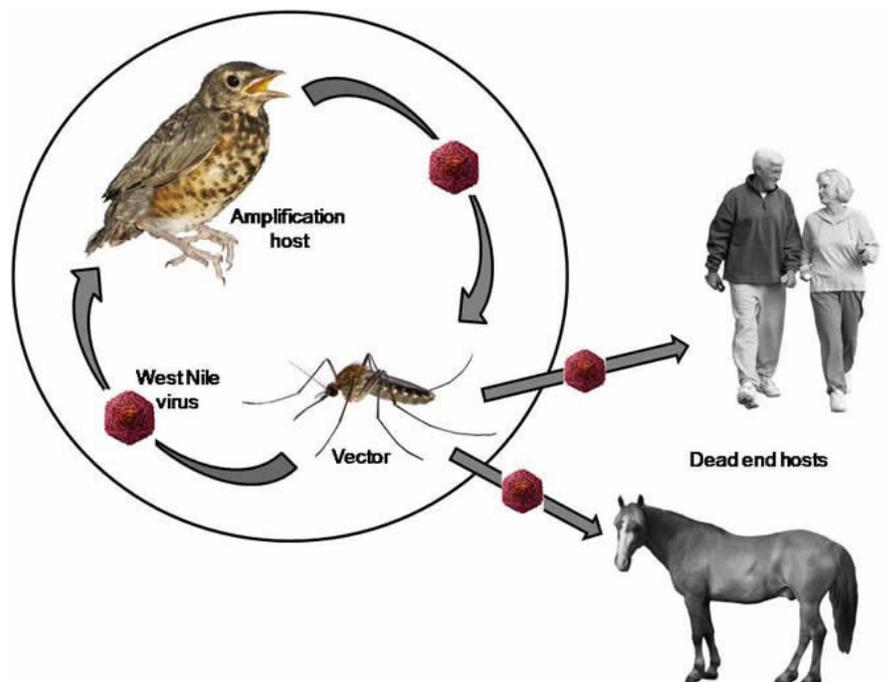
Sanitarian II. Precisely, I'm stationed at the Hickman's Family Farms plant #2030 as a Resident Grader in Charge.

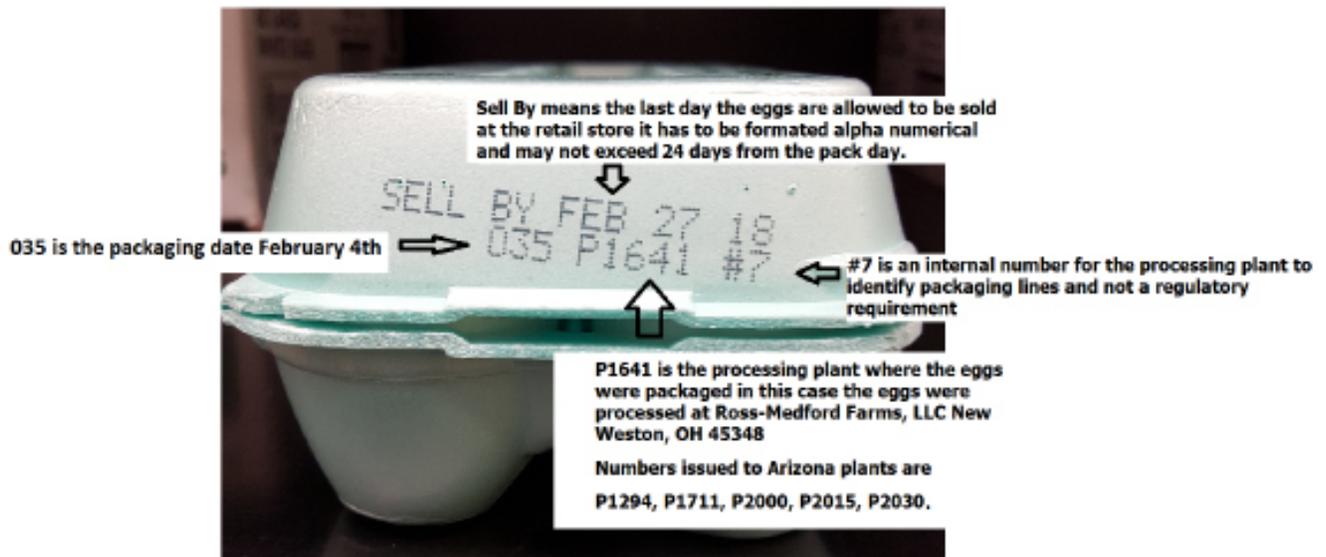
My everyday goal is to provide the best possible service while applying USDA AMS rules and regulations. And there are a lot. Currently, I'm studying to become a registered health sanitarian with the State of Arizona. This is something I would love to do in the future. I love everything about grading the eggs for export, preparing the paperwork, and shipment... besides the everyday plant duties of a Shell Egg Grade of course.

West Nile Virus *continued from page 1*

dawn and in highly shaded, moist or irrigated areas) is recommended. Fans providing constant airflow through a stable can help reduce the ability of the insects to fly to their targets effectively. Cleanliness in cleaning up manure and debris around the property. Maintain waterers in a clean and operational manner being sure to clean out water troughs on a regular basis is also important.

By following these general guidelines, you can minimize the likelihood of a significant exposure or occurrence of WNV in both your horses. Finally, WNV can affect people through mosquito bites as well, so making sure to eliminate mosquito breeding sources as mentioned above will help protect you and your family.





What to look for when buying eggs

by Roland Mader, Dairy and Egg Program Manager

Expiration dates and grade of the eggs

What do all the numbers listed on the side of my egg carton represent? Almost all cartons, overwrap, and types of consumer packages sold in Arizona require legible lot numbering on the consumer package, there are some exemptions for very small producers. The lot number is the consecutive day of the year in which the eggs were packed into the carton, and consists of three digits, such as 042, 155, 267, etc. Since the lot number represents the consecutive day of the year, eggs packed into the container on January 1st would be listed as 001. The other numbers are the packaging plants number and the expiration date of the eggs. The expiration date is specific to the grade of the egg Grade AA is the highest grade and so they are the freshest eggs they usually have an expiration date prefix "sell by" and this date may not exceed 24 days vs the Grade A eggs expiration date prefix is usually "Best By" and may be up to 45 days. Grade B is the lowest consumer grade and does not require to have a printed expiration date on the carton.

[CLICK HERE](#) to access a database for USDA plants.

Are eggs safe to eat after the Use By or Sell By date has expired?

The Use By or Sell By dates stamped on the end of an egg carton denotes the period of optimum egg quality and guarantees to the customer that they receive the grade that is labeled on the carton. As eggs age, the yolk membranes and tissues weaken and/or moisture is absorbed from the albumen (white). As a result, the yolk begins to flatten and the albumen becomes watery. This is indicative of a Grade B, quality egg. For baking purposes, a higher quality egg (Grade AA or A) is preferred. For hard-boiling purposes, a lower quality egg (Grade B) is preferred. Additionally, retailers utilize the Use By or Sell By dates for stock rotation or inventory control. Expired eggs are not allowed to be sold.



Why do some egg cartons contain the AZDA grademark or USDA grade-mark (shield) on them, while others do not? Aren't all eggs graded?

Eggs in cartons that do not contain the AZDA or USDA grade-mark (shield) are required by the Arizona Administrative Code to meet USDA's facility, sanitation, and labeling requirements (7 CFR Part 56) and do undergo the in house grading and certification process in accordance with the U.S. Grade Standards, Grades, and Weight Classes for Shell Eggs (pdf) (AMS 56). However, for those packages no inspector is on duty at the time that the eggs are being packaged to ensure all eggs meet the standard and requirements. Eggs without a shield get inspected during unannounced visits at the producer and in retail stores.



Let's talk about yogurt

Filled with protein, packed with probiotics, and loaded with bone-building calcium, yogurt is one of the most nutritious foods to help aid digestion and get you one step closer to those summer body goals. When you combine that with its versatile ability to take on flavors and uses, yogurt is one of the greatest foods available! Natural yogurt can be a low-calorie, high-nutrient food packed with protein. For these reasons, yogurt has become such a popular movement in the health food world.

The yogurt section of the market has grown and the options have become overwhelming. There are of various types of yogurt. Some yogurts are a less healthy option so when buying yogurt, look for yogurt without added sugar or unnecessary additives, some products have high quantities of added sugar and other ingredients that may not be beneficial. All yogurts contain some natural sugars, look for a product with less than 15 grams of sugar per serving. In most cases the lower the sugar, the better for your health, as long as it does not contain any artificial sweeteners. Packaged products like cereals and bars claiming to be "made with real yogurt," yogurt-covered raisins and other products with yogurt coating contain only a small amount of yogurt powder. Yogurt powder is heat-treated, and heat kills the beneficial bacteria. Yogurt coatings are made of sugar, oil, whey, and yogurt powder.

Yogurt is cultured milk that is thickened through lactic-acid producing cultures being added to milk. This also creates that familiar sour flavor of yogurt. This kind of yogurt tends to be thinner than yogurts like Greek or Australian because it hasn't been strained and thus has more liquid content. An unstrained yogurt is a great option for kids because some are turned off from the thicker consistencies. It's a perfect way to get the calcium to build strong bones and help digestion. Low-fat, or reduced-fat yogurt, is made with 2-percent milk. Non-fat yogurt is made with zero percent or skim milk.

Traditional (unstrained) Yogurt

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Greek Yogurt

Greek yogurt has become the most popular variety of yogurt in the past few years, making up 40 percent of the total yogurt market. Compared to unstrained yogurt, Greek yogurt has twice the protein, less sugar, and fewer carbs than regular milk yogurt. Avoid unnecessary thickeners like whey concentrate and modified corn starch.

Skyr, AKA Icelandic Yogurt

Skyr is Greek yogurt's is the newest trend and the biggest competition in the yogurt-picking game. 'Skyr' is Iceland's version of cultured dairy, is made with milk and live active cultures, and then strained 4 times. The thickest in consistency, Icelandic yogurt is something you can really sink your teeth into. It's traditionally made from skim milk but is also available in varieties with 0, 2 or 4 percent. It's also filled with more protein per serving than any other yogurt!

Drinkable Yogurt

Perfect for packing lunches for the kids or when you're on the go, drinkable yogurts come in almost every variety and flavor. They range from super watery to ultra-thick and have flavors that range from tart to sweet. The options are endless!

Frozen Yogurt

Frozen yogurts are often seen as a healthful alternative to ice cream. However, many frozen yogurts contain the same amount of sugar or more as regular ice cream.



Training Changes to Meet Today's Challenges

by Rick Mann, MPI
Program Manager

In today's ever-changing world, the way we receive our training is being affected as well as a multitude of other day-to-day changes in our lives. With COVID-19, attending a training class is no longer a long, internal procedure. The uncertainty of flying and holding classes with large numbers of students in the

confinements of one room has caused everyone to step back and rethink how we are going to get our training needs done. The answer seems to be "Virtual Training", this is where the student logs onto a computer and takes the class via the internet just like most students have been doing since March across the country.

USDA has now implemented the Virtual Inspection Methods training class which takes a previous in-person class that lasted 4 weeks and condensed it into a 2-week class with the final exam on the last day all from your computer. After passing the final exam, the student is then required to complete 2 weeks of on the job training with their supervisor who verifies that they are implementing the training as instructed.

The class covers the basic concepts of meat inspection such as Sanitation Performance Standards (SPS) which is overall sanitation of a plant that does not affect food contact surfaces and potentially lead to adulteration. Once a food contact surface becomes involved, it falls into the Sanitation Standard Operating Procedures (SSOP). Every establishment is required to develop its SSOP's and implement the specific procedures listed to prevent direct contamination or product adulteration. If direct product contamination or adulteration does occur it then becomes a food safety hazard which falls into the category of the Hazard Analysis and Critical Control Points (HACCP). Time is spent going through each of the 7 steps of HACCP and learning the proper way to gather information, assess the information, and determine if the establishment is in regulatory compliance (GAD).

The course also goes into great detail about the exact Regulatory Control Actions (RCA) that need to be taken both to bring the establishment under compliance while giving them due process. Part of the hands-on activities included learning the Public Health Inspection Services (PHIS) system which is where all of the tasks, communication with establishments and fellow inspectors, non-compliance reports, sampling alerts, meeting agendas, and establishment profiles are done on a daily basis. Sanitary Dressing Procedures, Food Defense Plans, Humane Handling, Hazard Analysis Verification tasks, Slaughter Food Safety Standard, Sampling Management, Pathogen Reduction, Lethality, Stabilization, and Multiple Hurdles, and more topics are also covered.

AZDA's MPI team members Brianna Schwanenberger and David Gaitan recently completed this new virtual training. Only time will tell if USDA will continue to offer this format for the training or if it will go back to the in-person training once this pandemic is over. One thing is for certain it is cost-saving allows staff that previously could not participate in the training due to budget restraints or time issues the ability to do so.

Contact Us

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Avian Disease:
1-888-742-5334

Self-Inspection:
(602) 542-6407

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



Hot Cross Buns as featured by the [Incredible Egg](#)

What You Need

3 large eggs, divided
3 cups bread flour
1/3 cup sugar
1/4 tsp. ground cloves
1/2 tsp. ground nutmeg
1/2 tsp. ground allspice
1 tsp. ground cinnamon
1 1/2 tsp. salt
2 (1/4 ounce) packets instant yeast

1 tbsp. lemon zest
1 1/4 cups milk, room temp
1/4 cup butter, melted and cooled
1 cup raisins
1/2 cup sugar
1/2 cup water

Directions

COMBINE flour, sugar, cloves, nutmeg, allspice, cinnamon, salt, yeast and lemon zest in a large bowl of a stand mixer.

ADD 2 eggs to milk and BEAT until mixed well. ADD milk/egg mixture and butter to flour bowl. Using stand mixer's hook attachment, MIX until dough is sticky; about 2 minutes, scraping flour from sides of bowl into dough. COVER bowl with plastic wrap and let REST in warm area of your kitchen for 30 minutes. ADD raisins and MIX again with stand mixer's hook attachment. COVER bowl with plastic wrap and let REST in a warm area of your kitchen for 1 hour or until dough doubles in size.

LINE a large baking tray with parchment paper. DIVIDE dough into 12 balls (about 100 grams each). ARRANGE on baking sheet about 1/2-inch apart. COVER with plastic wrap loosely and let REST 45 minutes or until the buns double in size.

PREHEAT oven to 375° F.

MIX together 1/2 cup flour and 1/2 cup water in a small bowl to make paste. ADD to piping bag or plastic bag with tip cut off. PIPE a cross on each bun.

BEAT one egg in a small dish. BRUSH a small amount on top of each bun. BAKE for 20-25 minutes or until golden brown. REMOVE.

HEAT sugar and water in a saucepan over medium heat. BRING to a boil, stirring to dissolve sugar. SIMMER for 3 minutes then REMOVE from heat and BRUSH a small amount on top of each bun.

