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## Emergency Response in Tonopah

by Captain Richard Shore, Livestock Inspection Program Manager

On June 17th, the Arizona Department of Agriculture’s Animal Services Division responded to a stray cow stuck in a cattle guard. As officers and inspectors arrived on scene, they found that this was not a cow stuck in a cattle guard but that it was a cow stuck in a large canal. The canal was not completely full of water but the cow appeared to be tired from walking against the current. After making sure the animal was in good shape, they setup their plan to remove the animal.

The canal had a ramp built into it for these types of occasions. As the staff tried to guide the animal to walk on its own up the ramp it refused to cooperate. The cow had to be roped and pulled up the ramp by a truck. Once the cow was removed from the canal, it started to fight. It rammed the side of the truck and jumped into a smaller canal next to the larger canal. Our staff was able to pull the cow out by hand and secure it to a post until the owner arrived. The brand came in handy as it was the return address for the owner. Prior to removing the cow from the canal the owner was contacted and he was on his way with help. When the owner arrived he and some other cowboys roped the cow and loaded it into their trailer. This was all done with no injuries to the cow, AZDA staff, or the cowboys that assisted.

This is another example of the everyday work that our officers and inspectors do to help the ranchers in our areas.







## Humane Handling

by Rick Mann, MPI Manager

In addition to the slaughter and processing requirements our AZDA Meat and Poultry Inspection inspectors perform on a daily basis they also enforce humane handling requirements to ensure no animal is mistreated prior to and during slaughter.

The federal Humane Methods of Slaughter Act (HMSA), 21 U.S.C.610(b), defines the use of humane methods in the slaughter of livestock to prevent the needless suffering of livestock. It results in safer and better working conditions for persons engaged in the slaughter industry; brings about improvement of quality of products; and produces other benefits for producers, processors and consumers of livestock products in interstate commerce.

By the authority of Arizona Revised Statute § 3-2016 and A.A.C R3-2-202, slaughtering or handling of livestock in connection with slaughter in any manner not in accordance with regulatory requirements of 9 CFR 313 is prohibited.

This applies to all animals on the premises of an Arizona inspected slaughter facility regardless if the animal is designated for slaughter under inspection or for slaughter under a custom exemption. The slaughtering of livestock shall, therefore, be carried out only by humane methods following the regulations in 9 CFR 313 to include:

In the case of cattle, calves, sheep, goats, swine, and other livestock shall be rendered insensible to pain by a single blow or gunshot or by an electrical, chemical or other means that is rapid and effective, before being shackled, hoisted, thrown, cast or cut.

Or by slaughtering in accordance with ritual requirements of the Jewish faith or any other religious faith that prescribes a method of slaughter where the animal suffers loss of consciousness by anemia of the brain caused by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument and includes the handling of the animal during the slaughter process.

Some other parts of 9 CFR

313 include holding pens and runways shall be in good repair to prevent injury or slips and falls to livestock. Water shall be available at all times. Feed shall be provided if an animal is kept on site for more than 24 hours prior to slaughter.

Trained inspection personnel are to perform verification of the facilities' humane handling activities whenever animals are on site to verify compliance with the regulatory requirements of 9 CFR 313. When inspection personnel observe regulatory non-compliance that causes injury and distress to animals and is of an egregious nature, enforcement of regulatory control action may result in further progressive enforcement actions.

An egregious situation is any act or condition that results in severe harm to animals to include:

1. Making cuts on or skinning conscious animals;
2. Excessive beating or prodding of ambulatory or non-ambulatory
3. disabled animals or dragging

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# Humane Handling

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- of conscious animals;
- 4. Driving animals off semi-trailers over a drop off without providing adequate unloading facilities (animals are falling to the ground);
- 5. Running equipment over conscious animals;
- 6. Stunning of animals and then allowing them to regain consciousness;
- 7. Multiple attempts, especially in the absence of immediate corrective measures, to stun an animal versus a single blow or shot that renders an animal immediately unconscious;
- 8. Dismembering conscious animals, for example, cutting off ears or removing feet;
- 9. Leaving disabled livestock exposed to adverse climate conditions while awaiting disposition, or
- 10. Otherwise causing unnecessary pain and suffering to animals, including situations on trucks.

In the event of an egregious finding slaughter would be stopped immediately. The facility would not be allowed to resume slaughter until the establishment could verify it had implemented corrective actions to ensure the noncompliance would not reoccur.



## Storage Guidelines to Maintain Quality, Freshness and Safety of Dairy Products

by Roland Mader, Dairy & Egg Manager

Proper storage and handling of food products is a necessity that will help maintain the quality, freshness, and safety of the items you purchase and provide for your family.

Dairy foods are perishable and should always be kept cold. Here are some general guidelines for storage from date of purchase.

	Refrigerator (at or below 40°F)	Freezer (at or below 0°F)
Cheese, hard (ex. Swiss or Cheddar)	3 to 4 weeks.	6 months
Cheese, soft (ex. brie)	1 week	6 months
Cottage cheese, ricotta	1 week	Don't freeze
Cream cheese	2 weeks	Don't freeze
Cream, heavy	1 month	Don't freeze
Milk	5-7 days	3 months
Sour cream	7-21 days	Don't freeze
Yogurt	7-14 days	1-2 months
Half & Half	3-4 days	4 months

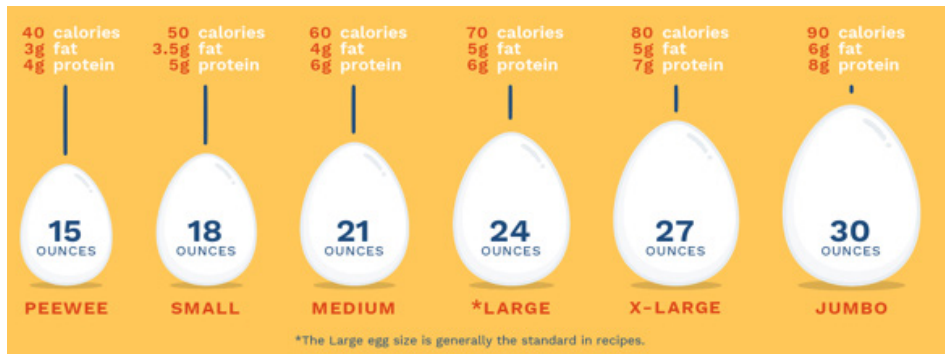
Because of the way it is processed, shelf-stable (UHT – ultra high temperature) milk can be stored at room temperature; however, once opened, it must be refrigerated.



# Egg Sizes by Egg Control Program

If you're into baking then you know precision is key and it requires much more attention than simply making a grilled cheese sandwich. When they say baking is a science, they really do mean it, and so much of that science is tied to the humble egg. Eggs are essential to baked goods from cakes to custards and everything in between. Eggs are important for structure and volume, so if there is a variance in egg size, the outcome may vary as well. This is why a tried and true cake recipe may come out flatter than before or taste more egg-y than usual. The texture may also be affected by egg size; too many eggs and the texture is rubbery, not enough eggs and the cake will be too crumbly. Many recipes do not specify egg size, however, large eggs are the standard. Below is a size chart of chicken eggs that are most commonly found in U.S. grocery stores. The smallest is called a peewee and the largest are jumbos.

As you can see in the chart, egg size is based on the weight of the



egg, not the appearance. The USDA determines the size of the carton on the average weight per dozen, so individual egg size varies. AZDA has inspectors both in the plants and at retail and warehouse locations to verify the sizes of eggs to ensure consumers are getting what the carton advertises.

So what do you do if you only have mediums or jumbos on hand? Use the charts below to make substitutions. For measuring with cups, scramble the eggs a bit first and then pour into the measuring vessel. If you are making a big batch, it is recommended that you weigh out the eggs. This will ensure that your cookies and cakes not only taste great but look great too.

Egg Size	Number of eggs equivalent to 1 cup.		
	Whole	Whites	Yolks
Jumbo	4	5	11
X-Large	4	6	12
Large	5	7	14
Medium	5	8	16
Small	6	9	18

Source: American Egg Board

Egg Size Substitution				
Large	Jumbo	X-Large	Medium	Small
1	1	1	1	1
2	2	2	2	3
3	2	3	3	4
4	3	4	5	5
5	4	4	6	7
6	5	5	7	8

Source: American Egg Board



## Sausage & Bacon Egg Salad Sandwich on Ciabatta

As featured by the [American Egg Board](#)

Yield: 12 servings

### Ingredients

- 1 lb., 5 oz.\* hard-cooked eggs (12 large), peeled
- 2 oz. (1/4 cup) cooked diced bacon
- 2 oz. (1/4 cup) cooked sausage of choice
- 2/3 cup mayonnaise
- 2 tsp. chopped chives
- 1/2 tsp. salt
- 1/4 tsp. pepper
- 12 ciabatta rolls (3-4 oz. ea.), halved

\*If using peeled hard-cooked egg product.

### Directions

1. Slice eggs in half length-wise. Remove 3 yolks; reserve. Chop remaining eggs and add to a medium bowl along with diced bacon and sausage.
2. In a small bowl, mash the reserved egg yolks; add mayonnaise and mix until creamy. Blend in chives, salt and pepper. Mix dressing into egg mixture.
3. For each sandwich, portion about 2/3 cup egg mixture onto ciabatta roll bottom. Close with top. Repeat for remaining sandwiches and serve immediately.





# Trichomonas Feotus Vaccine

by Dr. Peter Mundschenk & Dr. Cody Egnor, State Vet's Office



Trichomoniasis (Trich) has been recognized as a venereal disease of cattle that has caused issues for western herds since at least the early 1950s. Trich has an impact on the reproductive performance of infected herds through fetal losses and decreased pounds of calf at weaning. Characteristics of this disease such as venereal transmission and typically transient female infections lend itself to control. However, unapparent, chronic infections in older bulls have been an obstacle to eliminating trichomoniasis from many extensively managed cattle populations around the world.

While most research about *Trichomonas foetus* in cattle revolves around prevalence, diagnosis, and the significant economic loss in beef cattle. Unfortunately, there is not a lot of consensus into what to do when it's in a herd and more important how to get rid of it. One of the increasingly effective methods of control of *Trichomonas* is through vaccination. Currently, on the market there are several products when applied in the right situations have shown in studies and on ranches to increase the number of calves during an outbreak of Trich. The Trich vaccines that are available state clearly that the vaccine given at appropriate doses do not prevent the cow or bull from getting Trich only that it lessens the "clinical signs" of *Trichomonas* in the cow. Clinical signs in this case means an aborted calf. In most Trich infected herds, the Trich vaccine increases the amount of calves born by 20-50%. More calves born equal more pounds of calves weaned and income received.

Many ranches that are using the Trich vaccines do so for a variety of factors that stem from an increased risk of Trich in their herd. These increased risks include stray cows or bulls commingled in their herd, an open herd, unknown regional Trich status in cows or bulls, and prolonged calving interval.

Veterinarians are a valuable resource to help identify if a *Trichomonas* vaccine would be effective depending on risk, in your herd. There are many tools and control strategies available to producers and veterinarians to help fight the battle against *Trichomonas* in the state of Arizona.



## Contact Us

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**Meat & Poultry:**  
**(602) 542-6398**

**Poultry Disease  
Hotline:**  
**1-888-742-5334**

**Self-Inspection:**  
**(602) 542-6407**

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

