

What is Highly Pathogenic Avian Influenza?



By Nathan Kroh

Highly pathogenic avian influenza, or HPAI, is a virus that infects domestic poultry such as chickens, turkeys, quail, and geese, and wild birds such as shorebirds and waterfowl. The original source of the virus that has recently affected many commercial operations in the Midwest has not been identified, but migratory waterfowl, smuggled poultry and poultry products, and equipment have been identified as potential sources of introduction of the virus in the past. To limit further spread of the virus, flocks confirmed positive for HPAI are quarantined and humanely depopulated. The facility is disinfected and nearby flocks are quarantined and closely monitored for signs of the virus. Birds from positive flocks will not enter the food system.

Avian influenza is categorized into two major groups - highly pathogenic and low pathogenic. Low pathogenic strains of avian occur naturally influenza in migratory birds and cause only slight illnesses, but there is concern that low pathogenic virus strains can mutate into a highly pathogenic strain of avian influenza. The US does not consider HPAI to occur naturally here, but three previous outbreaks (1924, 1983 and 2004) have been detected and controlled. The most recent outbreak in the US has affected 13 states and over 29 million birds, causing many export markets to shut down the trade of poultry products.

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What would you like to read in the next issue?

The Meat Messenger is your newsletter. If you like the content, please feel free to share this issue with your employees, your livestock producers and customers. We welcome any questions, comments, or suggestions for future topics. Please contact **Nathan Kroh** at <u>nkroh@nd.gov</u> or 701-328-4767 or **Julie Nilges** at <u>inilges@nd.gov</u> or 701-204-3248.

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Regulation Reminder

North Dakota Administrative Code CHAPTER 7-13-05-02. Post-mortem inspections

The commissioner shall cause post-mortem inspections to be made on all carcasses and parts thereof of cattle, swine, sheep, goats, farmed cervidae, llama, horses, equines, other large domesticated animal, and poultry usable as human food prepared at a slaughtering, meat canning, salting, packing, rendering, or similar establishment in this state in which carcasses or parts thereof are prepared solely for intrastate commerce. Animal carcasses or parts thereof determined to be unadulterated must be marked, stamped, tagged, or labeled as "Inspected and Passed". Inspectors shall label, mark, stamp, or tag as "Inspected and Condemned" animal carcasses or parts thereof found to be adulterated. Carcasses or animal parts inspected and condemned must be destroyed for food purposes by the establishment in the presence of an inspector. Meat and meat food products inspected and passed under this title may be shipped in interstate commerce when federal law permits state-inspected meat and meat food products to be marketed interstate. All inspections are to be done in accordance with title 9, Code of Federal Regulations, parts 310 and 381.

History: Effective August 1, 2000; amended effective January 1, 2004. General Authority: NDCC 36-24-24 Law Implemented: NDCC 36-24-24

Anniversary Announcement

The 109 year anniversary of The Meat Inspection Act of 1906 and The Food and Drug Act of 1906, signed into law by President Theodore Roosevelt, will be celebrated on June 30.

For more information and facts from the beginning of FSIS, visit Agency History at <u>http://www.fsis.usda.gov/wps/portal/informational/</u> <u>aboutfsis/history/history</u>, and North Dakota State Meat and Poultry Inspection Program's history at <u>http://www.nd.gov/ndda/program/</u> <u>meat-inspection</u>.

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The transmission of HPAI to humans has not occurred in the United States, but cases have been known to occur in Asia. Among birds that contract HPAI, between 90% and 100% of the birds die from the infection. It is imperative that anyone handling domestic poultry or wild birds must be careful and should take special precautions to prevent the further spread of the virus. The following are some guidelines to increase biosecurity practices:

- Keep "all-in. allan out" philosophy of flock management. Avoid skimming flocks - birds left behind are exposed to work crews and equipment that could carry poultry disease viruses. Process each lot of birds separately, and clean and disinfect poultry houses between flocks.
- Protect poultry flocks from coming into contact with wild or migratory birds. Keep poultry away from any source of water that could have been contaminated by wild birds.
- Permit only essential workers and vehicles to enter the farm.
- Provide clean clothing and disinfection facilities for employees.
- Thoroughly clean and disinfect equipment and vehicles (including tires and undercarriage) entering and leaving the farm.
- Do not lend to or borrow equipment or vehicles from other farms.
- Change footwear and clothing before working with your own flock if you've visited another

farm or live bird market or avoid visiting another bird farm if possible.

• Do not bring birds from slaughter channels, especially those from live bird markets, back to the farm.

As a reminder, the proper handling and cooking of poultry and eggs to an internal temperature of 165 °F kills bacteria and viruses. Poultry products are only made from healthy flocks and a stringent testing program prevents any contaminated birds from entering the food system.

For more information, visit the USDA website: <u>http://www.usda.gov/wps/portal/usda/usdahom e?contentidonly=true&content id=2005/10/0458.xml</u> or review the Animal and Plant Health Inspection Services brochure at <u>http://www.aphis.usda.gov/publications/animal_health/2011/</u>ProtectYourBirdFromAI_Eng.pdf

Sources:

Protect Your Birds From Avian Influenza (Bird Flu) USDA, Animal and Plant Health Inspection Services (2011). [Brochure]. Retrieved from <u>http://www. aphis.usda.gov/publications/animal health/2011/ProtectYourBirdFromAI Eng.pdf</u>

USDA, (2007), Questions and Answers: Avian Influenza [Press release] Retrieved from <u>http://www.usda.gov/wps/portal/</u> <u>usda/usdahome?contentidonly=true&co</u> <u>ntentid=2005/10/0458.xml</u>

Avian influenza (2015, April 10) in Wikipedia: The free encyclopedia. Retrieved April 15, 2015, from <u>http:// en.wikipedia.org/wiki/Avian influenza</u>

CDC (2008) Spread of Avian Influenza Viruses among Birds. Retrieved from <u>http://www.cdc.gov/flu/avian/gen-info/</u> <u>spread.htm</u>

6 Tips to Protect Your Flock

1. Keep your distance (restrict access to your property and your birds)

2. Keep it clean (clean and disinfect your clothes, shoes, equipment, and hands)

3. Don't haul disease home (if you have been near other birds or bird owners, clean and disinfect poultry cages and equipment before going home)

4. Don't risk disease from your neighbor (do not borrow lawn and garden equipment, tools, or poultry supplies from other bird owners)

5. Know the warning signs (sudden increase in bird deaths, sneezing, coughing, nasal discharge, watery or green diarrhea, lack of energy, poor appetite, drop in egg production, swelling around the eyes, neck, and head, and purple discoloration of wattles, combs, and legs)

6. Report sick birds (call your local or State veterinarian, or USDA toll-free at 1-866-536-7593)



Providing Meat for a Social Event? What you need to know

By Nathan Kroh

At most social functions, the main attraction is often the food. Not every party planner will know the regulations derived from the Federal Meat Inspection Act, so it is important that meat shops know the regulations. Many consumers assume that all meat is inspected; therefore, they assume that any butcher shop can provide the meat for their social functions. The primary goal of government meat inspection is to provide verification that meat products come from healthy animals and the products processed from those animals are processed in a manner to prevent adulteration and mislabeling of meat products. Without inspection, no third-party assurances are in place.

An animal slaughtered under custom exempt regulations has not been verified to be healthy and wholesome, and the owner of that animal accepts responsibility when consuming that meat. That is why custom exempt products must be used by the owner, members of his household, non-paying guests and employees and the meat products cannot be bartered, sold, given away or donated. Customers buying meat offered for sale expect that meat to be wholesome, and that can only be provided through state or federal slaughter inspections.

Retail exempt meat processors, such as stores processing meat for sale directly out of the retail case, operate under an exemption from inspection of the meat preparation. Retail meat processors first begin



by purchasing inspected and passed meat products. Once an inspected package is opened, that product is no longer considered a federally or state inspected product and is no longer eligible for wholesale, with the exception of limited sales to hotel, restaurant, and institutional accounts. Seeing the facility and meeting the employees gives consumers the chance to make a judgment call on whether they would like to purchase product from that establishment. All retail establishments must use federally or state inspected sourced meats, so the consumer is assured that the product originated from a sanitary environment and healthy animal. Therefore, the customer can judge the wholesomeness of the meat based on the sanitary conditions they personally observe and rely on the mark of inspection prior to that point.

The same third-party assurances are provided to those attending catered social events. The business preparing the meat products would assume responsibility and liability for serving the meal, so they must use meat of an inspected source. If uninspected meat was allowed to be used, it would increase the potential for multiple sources of contamination and food safety investigations would be hindered. Liability would be diluted and innocent parties involved could be held accountable for issues they may have never had control over. Meat prepared for an organized social event must come from an inspected source.

Non-profit companies are allowed to accept donated retail exempt or inspected meat products. The non-profit organization is then required to distribute the unprepared product to the needy or prepare that product for use on the organization's property. Sorry, no doggy bags. The meat cannot be directly sold and using retail exempt meat products for fundraising efforts (i.e door prizes and raffles) is not permissible unless the winner picks up the product directly from the retail shop.

Meat inspection regulations are developed to maximize consumer safety, prevent mislabeling and to assure consumers that only wholesome products are used at the final preparation site. Prudent meat plants will understand the regulations and freely discuss the rules with their customers. Communication with the public is the best tool for limiting violations of the regulations and developing a business built on honesty and integrity.



2nd Annual Snack Stick Challenge

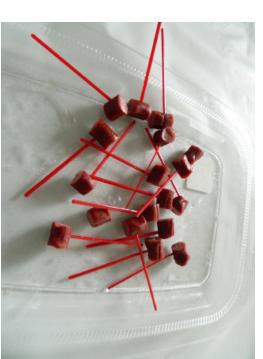
The ND Department of Agriculture will be hosting the 2nd Annual Snack Stick Challenge at the State Fair in Minot on July 20, 2015, at the Pride of Dakota tent. Following the success of last year's inaugural event, we are bringing back the challenge. The winner will earn bragging rights for the next year. The defending champion is L&M Sausage and Meats from Grand Forks, ND.

Contest Winner Selection:

Each contestant will be assigned a colored toothpick and judging will be done by popular vote.

The winner of the meat stick contest will be the contestant with the most ballots.

An informational card will be handed out to patrons as they leave the voting table.



Who Can Enter?

Retail exempt meat shops may enter the contest, but an employee of the company must be present to represent their product. State or federally inspected companies can enter inspected snack sticks without representation by a company employee.

No need to be a member of Pride of Dakota, but membership will allow access to a booth to sell your products directly to State Fair patrons and others at Pride of Dakota showcases. It will also allow you to put the highly respected Pride of Dakota label on your product.

Entrants Must Provide:

Each processor must provide evidence of proper cooking temperatures and cooling times for the lot of snack sticks provided.

A proper list of ingredients must be provided to contest coordinators with full disclosure of allergenic ingredients.

Samples (200 total) will be precut by processor to 1" in length, and sent to the Pride of Dakota by July 16, 2015.

Registration:

We have a limited number of spots left in the contest, so don't delay!

Call Jamie Good, Local Foods Specialist with the ND Department of Agriculture, at 701-328-2659 to register.

Post-mortem Inspection

By Nathan Kroh

"A careful post-mortem examination and inspection shall be made of the carcasses and parts thereof of all livestock slaughtered at official establishments..." Code of Federal Regulations – Title 9, Section 310.1.

In the previous issue of the Meat Messenger, an overview of antemortem inspection was included. This article continues with an explanation of inspection protocol after the animal has been slaughtered. North Dakota state inspectors perform ante-mortem inspection to identify any abnormalities visible prior to slaughter, but thorough inspection of each carcass continues through the process after slaughter.

The purpose of post-mortem inspection is to protect public health by ensuring that the carcasses and parts that enter commerce are wholesome, not adulterated, and properly marked, labeled and packaged. Part of the post-mortem inspection is the verification that the establishment is using sanitary dressing procedures to remove the head, dehide or dehair and eviscerate the carcass. The establishment is also responsible for properly presenting all parts of the carcass for individual inspection.

As in ante-mortem inspection, there are three possible outcomes or dispositions that follow postmortem inspection:

- **Passed**, and thus eligible to receive the marks of inspection
- **Suspect**, which must be retained for veterinary disposition; and



• **Condemned**, which is not eligible to receive the marks of inspection and **cannot enter commerce**

The inspectors are trained to detect abnormalities within a carcass. The lymphatic system functions as a filter for disease microorganisms and abnormal or toxic chemicals in the fluids of the body; therefore, the lymph nodes are among the first tissues to be visibly affected. Lymph nodes can be found throughout the body and can range widely in shape, size, and color. Incising lymph nodes takes skill and experience.

Beef inspection requires that the head is inspected separate from the body. The inspector observes the head's surface and the eyes, then four sets of lymph nodes (mandibular, parotid, lateral retropharyngeal and medial retropharyngeal) are cut to expose the inner surface. The cheek muscles are sliced open to view the inner tissue and lastly the inspector feels and observes the tongue. By completing these steps, many conditions can be identified in the tissues of the head, especially the lymph nodes, such as cancer eye, lumpy jaw, wooden tongue, tuberculosis, tapeworms, lesions and abscesses.

After the viscera is carefully removed. the inspector is responsible for observing the parts of the offal. The inspector will incise several more sets of lymph nodes around the lungs, and incise the heart. Inspectors also palpate, or feel, the various parts, looking for abnormal tissue or textures that may be indicative of disease. During the viscera inspection, the inspector is looking for many possible conditions.

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Abscesses, tuberculosis, granuloma, tumors, measles, pneumonia and various signs of inflammation could indicate conditions that may preclude the animal from being used as human food.

The liver performs many functions of metabolism, so it can be afflicted with many different diseases or conditions. Inspectors look for signs that would make the liver unwholesome for human consumption. Depending on the extent of the condition, the liver may be passed, trimmed and passed, condemned and saved for animal food use, or condemned from any use.

After all of the organs have been inspected, the split carcass is inspected just prior to the final wash station. The inspection involves a visual and hands on approach, in which several more lymph nodes are inspected and the whole carcass is observed for any signs of disease or foreign material contamination. If the inspector does not find any abnormal conditions, the carcass is passed and the establishment will wash the carcass before ageing. Signs of infection or disease will require a Public Health Veterinarian, specially trained in animal diseases, to make a final disposition of the carcass or parts.

Livestock Slaughter Inspection Training Course (2012). USDA, FSIS. Accessed 16 April, 2015. http://www.fsis.usda.gov/wps/ portal/fsis/topics/inspection/ workforce-training/regional-onsite-training/slaughter-inspectiontraining

FSIS Raises the Hotels, Restaurants and Institutions Dollar Limits

The Food Safety and Inspection Service (FSIS) is increasing the dollar limitations on the amount of meat and meat food products, poultry, and poultry products that a retail store can sell to hotels, restaurants and similar institutions (HRI) without disqualifying itself for exemption from federal inspection requirements.

According to FSIS's regulations for calendar year 2015, the dollar limitation for meat and meat food products is increasing from \$70,400 to \$76,900. For poultry products, the limitation is increasing from \$57,100 to \$58,200. FSIS is changing the dollar limitations from calendar year 2014 to reflect price changes for these products, as evidenced by the Consumer Price Index.

Under these regulations, sales to hotels, restaurants and similar institutions (other than household consumers) disqualify a retail store from exemption if the product sales exceed either of two maximum limits: 25 percent of the dollar value of total product sales or the calendar year dollar limitation set by FSIS. Any meat bearing the mark of inspection (including cured, cooked, smoked, or rendered product) can be sold without volume or dollar limitations, as long as the package integrity is maintained.

To avoid disqualification under the total product sales limit, retail stores must keep HRI sales to a limit of 25% of the total retail sales. Total sales to HRI may reach \$76,900, but in order to be compliant, the retail store must have sold at least \$307,600 in retail sales. All sales (HRI and retail to household consumers) are limited to the following weight restrictions:

- Sheep......27.5 lbs.
- Swine.....100 lbs.
- Goats.....25 lbs.



Retail exempt products sold to HRI may not be cured, cooked, smoked, rendered, or refined. The retail shop may trim, slice, grind, repackage, and freeze raw products for HRI sales. Retail meat businesses are required to keep records of ALL transactions to fully disclose all transactions of meat products. Records must be maintained for two years after December 31st of the year the transaction took place and made available upon request.

The effective date was April 23, 2015.

Jessie Pfaff Appointed as Livestock Development Specialist



The North Dakota Meat and Poultry Inspection Program (NDMPIP) would like to introduce Jessie Pfaff as the newest livestock development specialist for the North Dakota Department of Agriculture. After graduating from NDSU with a degree in animal science, she worked as a Communications Specialist for Clearwater Communications. While there, she served as the ND Ag Coalition Executive Director, US Durum Growers Association Assistant Executive Director, ND Ethanol Producers Association Project Coordinator, and Lewis & Clark Trail Guide Project Coordinator. She also served as the Executive Director of the ND Water Coalition and Communications Specialist for the ND Water Users Association.

Currently, she and her husband John live southeast of New Salem, where they raise Black Angus cattle and own several horses. They love the outdoors and hunting, and a majority of their free time is spent competing in rodeos and training roping horses.

Jessie will help North Dakota livestock producers develop and enhance the production, processing and marketing of their products. She will also provide

technical support, research, and contact information to commodity groups, individual producers, processors and producer cooperatives to enhance the profitability of the livestock industry.

FSIS Recalls & Alerts Count

FSIS Recall Summary for January - March 2015

Undeclared Allergens		29 recalls
Product Produced or Imported without Benefit of		12 recalls
Inspection		
Possible Microbial Contamination - Listeria, E.coli, or		5 recalls
Staph a.		
Possible Presence of Foreign Materials		2 recalls
Misbranded		2 recalls
Inadequate HACCP system		1 recall
Total Recalls in First Quarter 2015		51 recalls
Class 1 recalls - 40 Reasonable probability that eating the food will cause health problems or death	Class 2 recalls - 6 Potential health hazard situation in which there is a remote prob- ability of adverse health conse- quences from eating the food	Class 3 recalls - 5 Situation in which eating the food will not cause adverse health consequences

Further information on all current recall and alerts can be found at: <u>http://www.fsis.usda.</u> gov/wps/portal/fsis/topics/recalls-and-public-health-alerts

Classified Ads

We are always looking for industry related items to advertise in the Meat Messenger. We post sale and want ads FREE. Contact Julie Nilges (701-204-3248) at <u>jnilges@nd.gov</u> or Nathan Kroh (701-328-4767) at <u>nkroh@nd.gov</u> with product description and contact information.

Edgeley MeatProcessing, Edgeley ND: Recently updated facility with all equipment and supplies available for lease with option to buy. Owner is willing to work directly with new owner(s) to ensure successful transition. Large custom-exempt slaughter customer base and strong local retail sales. Processing area was previously state-inspected and the lease would include all of the recipes from the previously successful retail and wholesale meat accounts. The business is ready to go. Contact Larry Coon for more information at 701-658-9134 (cell) or 701-493-2327 (home).

True Brand cooler: Cooler has two sliding doors and was manufactured in 2001 - \$1,000; **New one-quart plastic containers with lids:** - \$20 per lot of 50. Please contact Calvin or Alex for more information at 701-743-4451. Located in Parshall.

Walk-in freezer and components (4 items): (1) Three-phase Copeland compressor Hp p62 Freon, new in 2005. (Model 4RA3-100A-TSK-800, serial 05A66497R). (2) Single-phase Bohn cooling unit (Model 2402B serial number DCD4540). (3) Larkin single-phase outside evaporator. (4) Walk-in freezer with shelves/baskets, sharp freeze shelves and cooling unit, has four-glass doors, free standing unit, walls snap together. Please contact Denise for more information at 701-438-2334. Located in Esmond.

Slaughter/processing business located in Esmond, ND. Fully operational meat processing facility, all equipment and supplies included. Currently custom-exempt, with option for retail and/or state inspected status, many equipment/facility upgrades last four years. Very strong customer base. Please contact Denise for more information at: 701-438-2334 or 701-351-1231.

*Housing is available and the local area market is favorable for those interested.

Find us on Facebook

Our Facebook page benefits both consumers and processors with facts about inspection, rules for producers who want to direct market their products, and tips for safely preparing meat and poultry products.

Please check out our <u>page</u> or feel free to ask a question by signing into Facebook and searching for North Dakota Meat and Poultry Inspection Program.



The Meat and Poultry Inspection Program Facebook Page

Meat Messenger

North Dakota Department of Agriculture 600 East Boulevard Avenue, Dept. 602 Bismarck, ND 58505-0020

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