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LIVE BIRD MARKETING SYSTEM UPDATE

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USDA-APHIS-VS-SPRS-AVIAN HEALTH

NATIONAL POULTRY IMPROVEMENT PLAN

OFFICIAL STATE AGENCY MEETING

PORTLAND, MAINE

MAY 16-17, 2017

2016 - Revised Uniform Standards

- At our annual (February 2016) Live Bird Marketing Systems Working Group meeting, **we received over 60 proposed changes** from stakeholders to the 2012 LBMS Uniform Standards. These guidelines are updated every 4 years.

- **Major Changes**

  - Changed the title of the Uniform Standard to address H5/H7 Avian Influenza (LPAI and HPAI) in the Live Bird Marketing System and made these changes throughout the document.

  - Removed the requirement of having an MOU in place to be a participant of the Live Bird Market System program.

2016 - Revised Uniform Standards

- **Major Changes**
  - We changed the verbiage throughout the document to reflect the APHIS reorganization.
  - Updated and described in detail the five official (approved) tests to align with NVSL protocol:
    - Agar Gel Immunodiffusion
    - Enzyme-Linked Immuno-assay (ELISA)
    - Real-Time Reverse-Transcriptase Polymerase Chain Reaction (rRT-PCR)
    - Antigen Capture Immunoassay Tests (ACIA).
    - Virus Isolation
  - Added the ELISA as an official test.

2016 - Revised Uniform Standards

- **Major Changes**

  - Provided better guidance on use of USDA-licensed type A influenza antigen capture immunoassay (ACIA) test
    - The ACIA must be conducted using test kits approved by USDA and the State.
    - The ACIA is an NPIP-LBMS approved test used for the detection of influenza A nucleoprotein in swab specimens from birds exhibiting clinical signs of disease (sick birds) or dead birds.
    - It is less sensitive than molecular tests; therefore, those collecting samples should collect additional swab samples and forward both the non-negative sample and additional samples to an approved lab for molecular testing to determine the virus status of the flock following any non-negative ACIA result.

2016 - Revised Uniform Standards

- **Major Changes**
  - Significantly shortened test definitions as all is in more detailed in Part IV
  - Defined “Appropriate sample”:
    - Samples collected by an animal health official or personnel authorized by the animal health official according to the target species, and type of testing planned; refer to:
      - WI-AV-0020 “*Avian sample collection*” https://www.aphis.usda.gov/animal_health/lab_info_services/downloads/WIAV0020.pdf

2016 - Revised Uniform Standards

- **Major Changes**
  - Explained how to collect appropriate swab samples for molecular testing to determine the virus status of the flock following antibody detection in production flocks.
  - Explained how to collect appropriate swab samples for molecular testing to determine the virus status of the flock following antibody detection in egg yolk from production flocks.
  - Replaced “presumptive positive, presumptive, and suspect positive” throughout the document with **“non-negative”**

2016 - Revised Uniform Standards

- **Major Changes**
  - Defined Non-negative flock/sample/specimen:
    - A flock, distribution system or market from which specimens yielded non-negative results for AI by an official and appropriate test performed at an approved laboratory.
    - Any specimen non-negative for AI must be confirmed by the NVSL.
    - Confirmation of a non-negative flock or market will be based on results of diagnostic testing and epidemiological data; and collection of additional samples for testing may be needed.

2016 - Revised Uniform Standards

- **Major Changes**
  - Added environmental PCR option for Post-Cleaning and Disinfection (C&D) environmental samples.
  - For States that are interested in running Post C&D environmental PCR:
    - We encourage them to contact the NVSL for use of a specific virus isolation protocol (NVSL approved internal control to monitor for PCR inhibitors is required).
  - We are still looking for partners to generate data on pre-cleaning samples.

Summary Report of LPAI H5 positive Live Bird Markets (LBMs) in Pennsylvania, New Jersey and New York - 2016

- On 6/28/2016 Routine surveillance samples were collected from a live bird market in Philadelphia. No signs of clinical illness were noted.
- On 6/29/2106 a Live Bird Market in Pennsylvania was tested and confirmed by NVSL to be positive for LPAI H5.
- This same day a Live Bird Market in NY was also confirmed positive for LPAI H5.
- A common New York distributor was identified and trace out shipments from this distributor had been ongoing.
- There were shipments of Muscovy ducks, delivered to several markets in NY, PA and NJ on shipment dates 6/14, 6/17, 6/21, 6/24, 6/28, and 7/1/2016 from the same distributor in NY.
- Distributor in NY, sourced birds from a supplier in Ontario, Canada.

Summary Report of LPAI H5 positive Live Bird Markets (LBMs) in Pennsylvania, New Jersey and New York - 2016

- State animal health officials, in cooperation with APHIS Veterinary Services, responded swiftly to the detection of H5N2 LPAI in LBMs in New York, Pennsylvania, and New Jersey.
- State animal health officials ordered quarantine and depopulation of the positive LBMs, and cleaning and disinfection procedures were completed with negative results for AI on environmental sampling.
- Epidemiological investigations identified a poultry distributer in New York as the source of birds delivered to all positive LBMs except for one market in New Jersey.
- State measures included quarantine, depopulation, and cleaning and disinfection of epidemiologically linked LBMs and distributer.
- Cleaning and disinfection completion dates were: July 14, 2016, for all positive LBMs in New York; July 14, 2016, for all positive LBMs in New Jersey; and June 30, 2016, for the positive LBM in Pennsylvania.
- **The LPAI incidents in LBMs in the three States are considered resolved.**

LBMS-WG Meeting- San Antonio, TX. February 22-23, 2017

- **71** participants
  - **28** USDA, APHIS, VS, **2** LBMS/poultry industry stakeholders, **1** CDC representative, **6** State animal health diagnostic lab representatives, and **34** State Department of Agriculture participants representing **30** States

- Welcome/Opening Remarks
  - **Dr. Susan Rollo -** Texas Animal Health Commission - **State Epidemiologist** for Dr. Andy Schwartz - State Veterinarian and Executive Director, Texas Animal Health Commission
  - **Dr. Michael Pruitt** - Assistant District Director, USDA APHIS VS, Texas, District 4 SPRS
  - **Mr. James Grimm -** Executive Vice President Texas Poultry Federation

- **2018 LBMS-WG Meeting – New York City, NY. February 21-22**

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Discussion of 2016 H5 LPAI response in PA, NJ & NY

FINDING CONCURRENCE AND MAINTAINING FLEXIBILITY

Courtesy- Dr. Leslie Seraphin

When LPAI H5/H7 Traced To Multiple Markets
Testing vs. Not testing

- Bottom line is to get rid of H5/H7 virus in the markets as quickly as possible
- Testing is at the discretion of the SAHO, AD, and VS Poultry Health Staff based on viral strain and epidemiology
- Treat un-tested markets (which received trace birds) as if they were test positive.
  - 3-5 day closure post sell down if state allows
  - market properly cleaned and disinfected
  - market must be dry to restock
  - post C&D environmental testing according to state protocol
  - restocking procedures per state protocol
  - Increased surveillance at the market as if it were infected (e.g. monthly testing until 3 negative tests)

- If multiple sources or epidemiology not clear – testing recommended, with follow-up based on test results
- Non-trace markets – quarterly surveillance testing should be done as soon as possible after discovery of H5/H7 in the LBMS
  - Once trace and infected markets have completed C&D and restocking, all additional markets in the state's LBMS should have surveillance testing done
  - It is preferable to perform the quarterly surveillance testing on non-trace markets as soon as possible after the infection mitigation is completed in trace and infected markets (for assurance disease hasn't spread)

Market C&D Post Infection
Market Personnel or Regulatory Personnel?

- SAHO can determine who performs disinfection of markets
- Recommendations to ensure market personnel correctly perform C&D (routine and post infection)
  - Markets should have a sign off sheet with the name and date of the person/people who performed the cleaning and disinfection
  - C&D sheets should be reviewed by regulatory personnel at each market inspection
    - If C&D sign-off sheet shows a new person (not someone who has done so in the past), regulatory personnel should arrange to be present at the next C&D done by the new person (post cleaning, prior to disinfection)
    - If market personnel indicate a new person will be doing the next C&D, regulatory personnel should arrange to be present at the market when the new person completes the cleaning and prior to disinfection
  - Pictorial, laminated flip books should be provided to markets to show proper C&D, highlighting areas frequently missed, what is clean enough, proper disinfection dilution, and proper disinfection contact time
    - Dr. Michael Kornreich had created such a book in the past – Dr. Wood will work with him on an updated book for the LBMS.
- California may have produced pictorial C&D instructions as well

Do we need to keep previously infected markets closed until the post C&D environmental samples are rRT-PCR negative? Should markets with positive environmental PCRs post C&D be required to repeat the C&D?

- SAHOs decision.
- LBMWG attendees reported while occasional positive environmental rRT-PCRs are found post C&D, no live virus has been isolated in recent years
- The group recommended research be done or a research review be done to determine if certain disinfectants are better at denaturing the AI virus
- Safety and ability to use in food areas also determines which disinfectant is used

General recommendations

- Distributors should be tested frequently
- Testing at least monthly was recommended for distributor facilities (testing of birds and environment)

Point for future discussion – should we allow red meat animals to be returned to LPAI infected LBMS? Should we be collecting oral swabs or nasal washings from rabbits, guinea pigs and other mammals housed in the bird area of LBMs for surveillance testing for IAV?

- Positive markets are required to sell down/depopulate bird species only. Red meat animals, such as rabbits, guinea pigs, sheep and goats, are permitted to return to the market post C&D. This decision is based on research done in the LBMS in NY in 2002 (Trock et al) were sentinel chickens were placed in the red meat area of LBMs and tested for avian influenza. IAV was not detected in the sentinels.

- In 2001, a risk analysis done in the LBMS in NY and NJ (Bulaga et al) found markets were at an increased risk for infection with LPAI H7N2 if they had rabbits in the market in the past 12 months. Over 67% of markets that had rabbits were found positive for H7N2. Having rabbits in the market significantly increased risk of infection (Univariate OR 4.6).

- Recent studies (Root et al) have shown that cottontail rabbits nasally inoculated with LPAI H4N6 become infected and shed the virus. Infected rabbits can transmit the virus to both other rabbits and mallard ducks.

- Dr. Root is looking at LPAI in wild mammals, not in domestic animals. In light of the recent findings in cottontail rabbits by Root et al, the ability of domestic rabbits, guinea pigs (cavies), and other red meat animals to become infected with and transmit LPAI H5/H7 viruses should be studied further. (For more discussion at the next LBMWG meeting)

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BIOSECURITY FOR BIRDS

2016-2017 OUTREACH CAMPAIGN

Courtesy - Donna Karlsons
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2016 Campaign Goals and Objectives

- Increase understanding of biosecurity practices among the target audience
- Improve awareness and use of available resources, educating the target audience and encouraging change to biosecurity practices
- Become a respected resource of information on biosecurity

EXPOSURE	ENGAGEMENT	INFLUENCE	ACTIVATION
Increase media outreach and placements, website views, follower base and total impressions.	Establish two new partnerships, increase social engagement and improve quantity and quality of photo submissions.	Improve positive sentiment around social content.	Maintain calendar requests/use, increase label requests from feed stores and partner posts from webinar.

2016 Campaign Activities

- Conducted phased **audits of social channels and conversation landscape** and **developed a social framework** for Healthy Harry content
- Created and ran **print, online and social ads** promoting biosecurity and the spring and fall webinars
- Facilitated **spring and fall biosecurity webinars**
- Made **outreach to partners and influencers** about webinar and labels
- Conducted **continuous social posts**; increased posting during webinar
- **Pitched social influencers, trade media** with biosecurity tips
- **Created and shared social toolkits** for spring and fall migratory seasons
- **Targeted markets of LA, San Francisco, Houston and Dallas** for ethnic outreach
- Ran **spots with stations** like KLTN (Houston), KZZA (Dallas), KSOL (San Francisco) and KLAX (LA) targeting ethnic communities
- **Created and shared social graphics**

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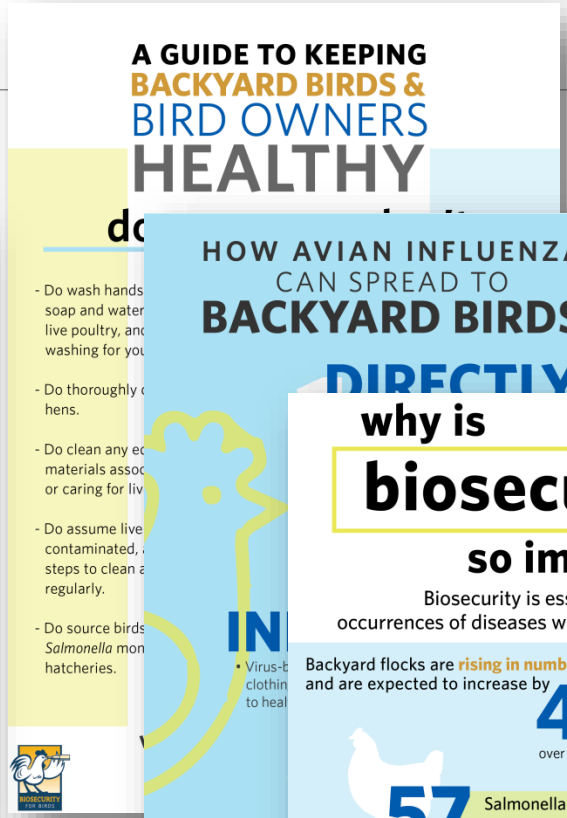
2016 Campaign Activities



2016 Highlights and Impact

321
Media and influencer touch points

1,389
Photo calendar submissions

2,927
calendar requests

28K
Website visits

552
Webinar participants (fall and spring)

53
Fair package requests

55K
Hatchery label requests

2016 Highlights and Impact: Social Media

4,188
New Facebook & Twitter followers

4.6 million
#CHICKENCHAT impressions

57%
positive sentiment on social media

20
partner social posts and shares

More than 5 million
social media impressions

2017 Campaign Focus

- *Primary*
- **Increase understanding of biosecurity practices** among the target audience
- **Improve awareness and use** of available resources
- Become a **respected resource** of information on biosecurity
- *Secondary*
- **Registration** for spring and fall webinars
- **Engagement** of backyard bird owning community
- Call for **user-generated content**, including content for calendar

2017 Campaign Activities

- Fall and Spring webinars
- Chick season info shared through partnerships
- Continued hatchery partnerships, including sharing social content and materials as well as labels
- Continued social media content and graphic creation
- Information packet share with youth education organizations
- Social toolkit development and share around migratory season
- Ethnic community information distribution
- Calendar distribution to educators
- Paid media in ethnic publications
- Media outreach
- Paid ad development

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Bird Health Awareness Week

February 27-March 4, 2017

Webinar on **March 2nd @ 4 PM EST** with the Chicken Whisperer, Dr. JoAnna Quinn from APHIS and Megin Nichols from CDC.

Spring into Chick Season with Biosecurity Basics
Learn how to protect your flock from disease and how to keep them healthy during chick season in the spring.

#ChickenChat2017 ran simultaneously on Twitter.

Follow @Healthy_Harry on Facebook and Twitter for more details and to register.

Looking Ahead

- Request your 2017 calendars
- Fair packages available year round
- Share your “success stories” on biosecurity
- Submit photos of birds for calendar inclusion

Defend the Flock

- The new **outreach and education campaign** founded on basic biosecurity principles that serves to keep biosecurity measures top of mind for commercial companies and their growers.

- It focuses on **protection and prevention**, which are relevant goals for poultry companies who want to avoid HPAI outbreaks and related losses in their operations.
  - https://www.aphis.usda.gov/animalhealth/defendtheflock

Live Bird Marketing System Continuing Education Training October 25-27, 2016

66 Participants

- ***23 USDA-APHIS-VS***
- ***1 USDA-ARS***
- ***23 States***
- ***12 University (CSU & TX A&M)***
- ***1 Industry***
- ***6 International***
  - ***Brazil, Honduras, Panama, Surinam, and 2-Thailand***

TEXAS A&M UNIVERSITY

Three Day Training consisted of:

✓Lectures

✓Laboratory

✓Field Trip

Courtesy – Dr. Marvirstine Yvette Briggs-Fisher

2016 LBMS Continuing Education Training Laboratory Exercises


Handling and Restraint


Necropsy

Specimen collection


Blood collection

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2016 LBMS CE Training Field Trip – Retail LBMs - Houston, TX.

FY 2017 Avian Health Budget Update

- Poultry health programs are funded through the avian health line.
- APHIS/VS is currently operating under a continuing resolution until April 28, 2017.
- FY16 funding was $55,340,000.
- *Funding levels will not be final until we get a budget*

Thank You For Your Attention!!!

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Questions???

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