


Section 2: SES Introduction

Note from Dr. Buswell:
This is only one of three sections of the Security Egg Supply presentation.
The entire presentation is available online at
http://secureeggssupply.com/wp-content/uploads/2014/01/2013_11_04-SES-intro-PPT-for-Web-FINAL-COPY.pdf




Preparedness/Response Goals

- Detect, control, and contain the FAD in animals as quickly as possible
- Eradicate the FAD using strategies that seek to stabilize animal agriculture, the food supply, the economy, and protect public health
- Provide science- and risk-based approaches and systems to facilitate market continuity for non-infected animals and non-contaminated animal products




SES: Introduction

- The SES Plan promotes food security and animal health through continuity of market planning during a HPAI outbreak
- This plan makes specific science- and risk-based recommendations
- Emergency decision makers (such as IC) should use THIS TOOL
- Ultimately this is a TOOL that is essential to use before and during outbreaks



SES: Who?


Collaborative Team:

- Multiple Private Industry Members
- USDA – APHIS - VS
- USDA – CEAH
- University of Minnesota
- Iowa State University
- State Departments of Ag and Health
- United Egg Producers
- United Egg Association
- American Egg Board



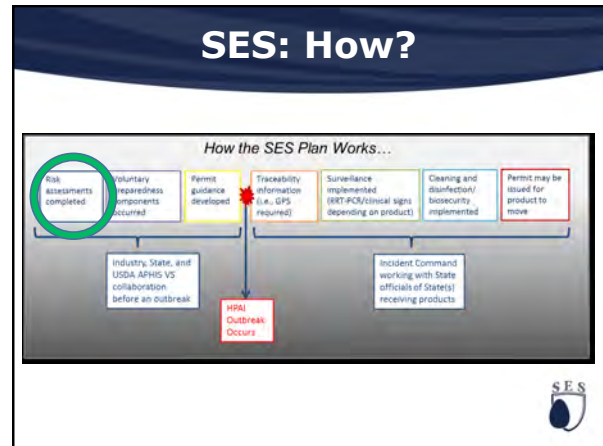
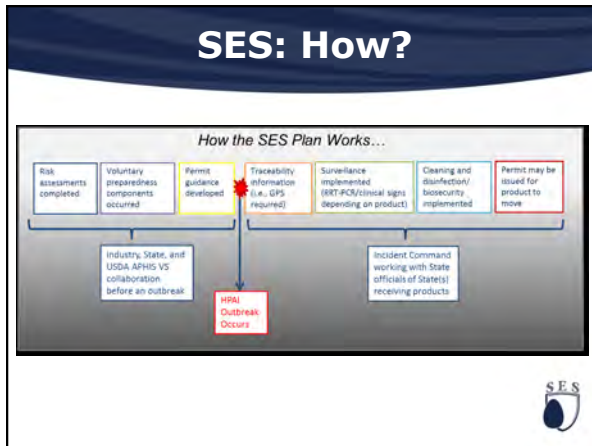

SES: Development

- **Based on current research and practice in:**
 - Virology
 - Flock husbandry
 - Epidemiology
 - Risk-assessment
- Uses **science- and risk-based preparedness** and response components
 - Provide guidance on permitting the **movement** of egg products from a Control Area
- Plan provides a high degree of confidence that egg industry products that are moved into market channels do not contain HPAI virus



Control Area: What is it?



SES: Risk Assessments

- **Definition of Risk Assessment**
 - Risk assessment is a scientifically based process to qualitatively or quantitatively characterize the likelihood of exposure to a hazard and the resulting adverse consequences
- **Objectives of SES Risk Assessments**
 - Disease and commodity specific
 - Proactively done
 - Science and risk base approach
 - Provide confidence for decision makers on permitting the movement of the commodity


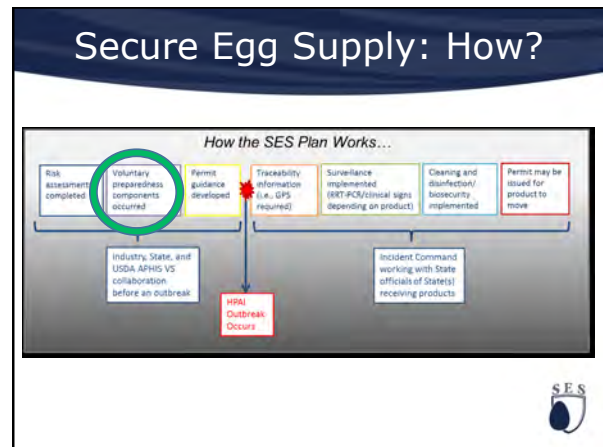
SES: Risk Assessments

- **Risk Assessments Include:**
 - **Current every day industry practices – things already done!**
 - Standard Operating Procedures (SOP)
 - Regulations – FDA, FSIS, APHIS
 - Good Manufacturing Practices
 - **In an Outbreak – Proposed Additional Mitigations**
 - Elevated Biosecurity
 - Surveillance Strategy
 - Cleaning and Disinfection (C & D) Guidelines
 - **Evaluated using accepted scientific techniques**

SES: Risk Assessments

Risk Assessment Uses:

- **Risk Categories**
 - Negligible Risk: Insignificant
 - Low Risk: Unlikely
- **Risk Assessors**
 - Evaluate level of risk and whether or not a hazard will occur in a scenario
- **Industry/Regulators – use risk assessment results**
 - Regulators ultimately decide what is an “acceptable level of risk” for their area and incident

SES: Voluntary Preparedness Component

- **Part of the Secure Egg Supply (SES) Plan**
 - Available on a VOLUNTARY basis to egg producers
 - Reduces the time required to meet the criteria for moving whole shell eggs.
- **Objectives of the Voluntary Preparedness Component**
 - To minimize the risk of exposure of poultry flocks to HPAI and to thereby limit the spread of HPAI during an outbreak
 - To provide a high level of confidence that whole shell eggs entering market channels for human consumption are free of HPAI virus.

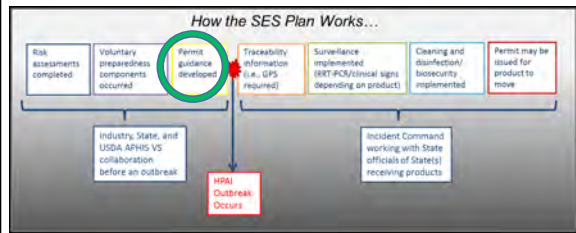


SES: Voluntary Preparedness Component

- **Voluntary Preparedness Component includes:**
 - Enrollment in the program **BEFORE** an outbreak
 - Audits for minimum biosecurity standards
 - Location verification of participating farms
 - Epidemiology data
 - Identify potential exposure during an outbreak
 - To document flock production parameters
 - Active surveillance in each layer house
 - A secure website to share information with Incident Commanders and authorized personnel



SES: How?

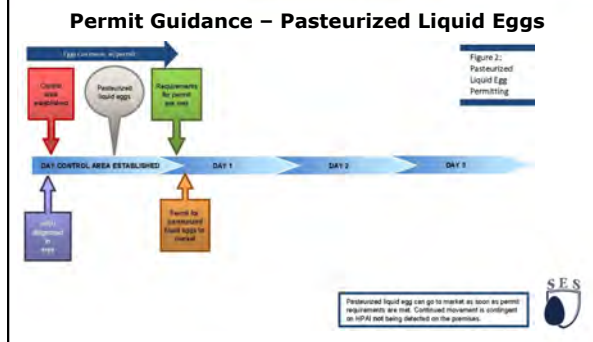


SES: Permit Guidance

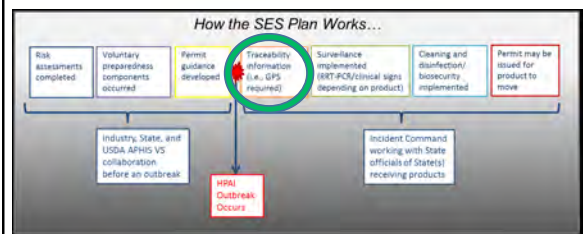
- **Permit Guidance Development**
 - Risk assessments, surveillance guidelines, truck and driver biosecurity and product specific biosecurity measures
 - Science-based guidelines for permitting the movement of eggs and egg industry products from operations in a HPAI control area
- **Permit Issued for Movement**
 - If flocks inside the control area meets permit requirements



SES: Permit Guidance





SES: How?

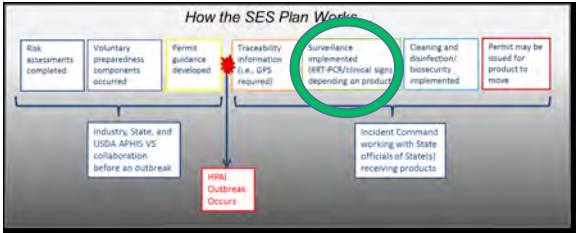



SES: Epi-Questionnaire

- **Epidemiology Questionnaire Includes:**
 - **Traceability information**
 - Premises ID
 - GPS coordinates
 - **Production parameters are normal**
 - No clinical signs
 - No abnormal mortality





SES: How?

SES: Surveillance Requirements



- **Mortality and Production Parameters**
 - Daily flock monitoring – signs of HPAI
 - Normal daily mortality
 - An increase in mortality is defined as daily mortality greater than 3 times the past 7-day average and greater than 0.03%
 - If mortality elevated other diagnostics needed
 - Monitor with RRT-PCR Testing
 - For those flocks not displaying mortality increase



SES: Surveillance Requirements

Testing Criteria:


- **RRT-PCR testing on:**
 - 5 or 11-bird pool samples per 50 dead
 - Must be dead or euthanized SICK birds
 - Must be done on each house on the premise
- **Negative Tests**
 - Negative tests are required daily for product that moves daily

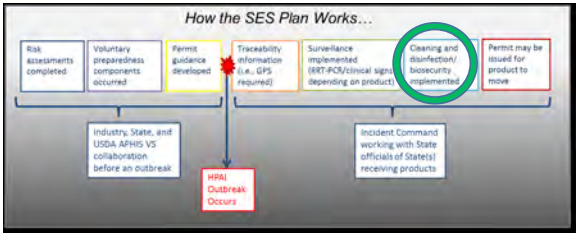

SES: Surveillance Requirements

Sampling:

- **Performed by:**
 - State or Federal regulatory officials
 - Individual authorized by Incident Commander
- **Procedure:**
 - 5 or 11 oropharyngeal swabs from 5 or 11 dead birds per house
 - Swabs are pooled
 - Samples submitted to authorized state veterinary diagnostic laboratory on same day of collection
 - Laboratory transmits RRT-PCR test results to Incident Command
 - Incident Command reports results to farm manager
- **Test Not Negative:**
 - Additional diagnostics will be conducted
 - If daily mortality spikes over normal production parameters additional diagnostics will be conducted





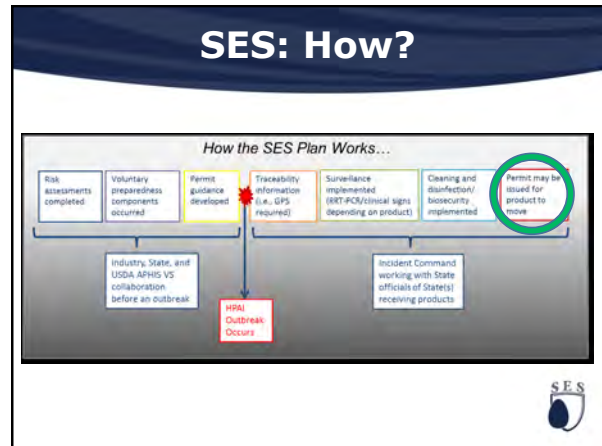
SES: How?



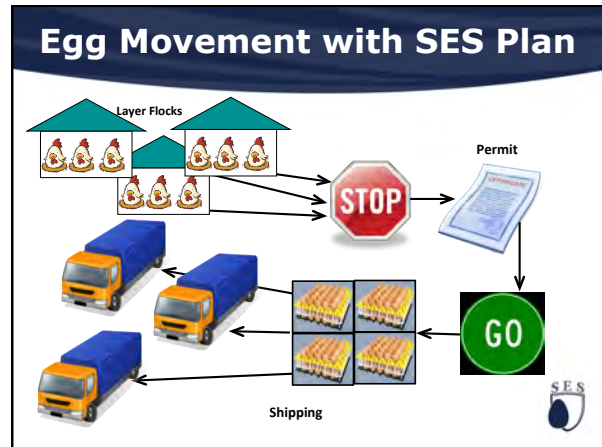
SES: C & D and Biosecurity

Cleaning and Disinfection (C&D) Biosecurity

- Truck and driver biosecurity
- Product specific biosecurity
- Premises Biosecurity
- Cleaning and disinfecting guidelines
- Permitted movement checklists






SES: Example Permit

SES: Incident Command

- **SES Plan provides the IC with:**
 - Proactive risk assessments
 - Surveillance and epidemiological data
 - Suggestions for truck and driver and product specific biosecurity
 - Permit guidance
- **IC makes final decision on permit for product movement**




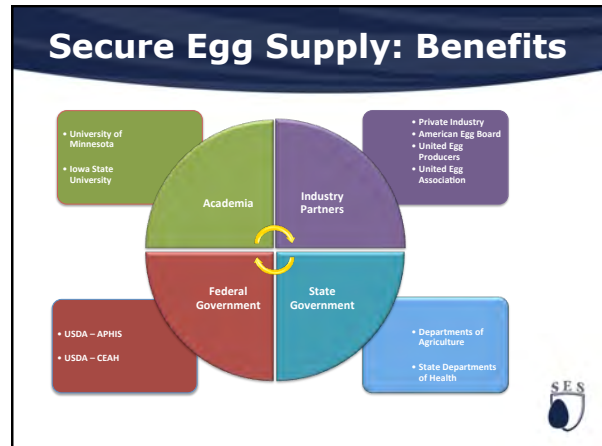
SES: Risk Assessment Commodities

- **Commodities :**
 - Pasteurized Liquid Egg
 - Non-Pasteurized Liquid Egg
 - Washed and Sanitized Shell Eggs (to Premise without Poultry)
 - Washed and Sanitized Shell Eggs (to Premise with Poultry)
 - Nest Run Eggs
 - Shells and Inedible Egg
 - Hatching Eggs
 - Day-Old Chicks



SES: Implementation


- **Who uses the SES Plan?**
 - Incident Commanders – government officials that will lead a response plan in case of an outbreak
 - Poultry Managers
- **How do they use the plan?**
 - First know it exists!
 - Summary of Permit Requirements is the most comprehensive and fastest source

Secure Egg Supply: Benefits

- Public/private partnerships are the only means for true success
- Deeper understanding of:
 - How industry works
 - Government's roles and responsibilities
- This collaborative effort is a model for addressing issues in other industries (i.e. FMD)

Slide Courtesy of Todd McAloon, Cargill



Secure Egg Supply (SES) Website

www.secureeggssupply.com



Thank You

If you have any questions, please direct your attention to the Secure Egg Supply Website and contact information will be available.

www.secureeggssupply.com

