

# Supplement 6

## Voluntary Preparedness Components of the Secure Egg Supply Plan

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This supplement to the *Secure Egg Supply (SES) Plan* describes the Voluntary Preparedness Components of the *SES Plan*.

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### S6.1 INTRODUCTION

#### S6.1.1 Preparedness Components

The Voluntary Preparedness Components of the *SES Plan* were the result of a cooperative agreement between faculty at Iowa State University and USDA-APHIS. Developed by the Center for Food Security and Public Health at Iowa State University in collaboration with the Center for Animal Health and Food Safety at the University of Minnesota, the egg industry, poultry veterinarians, and USDA-APHIS-VS, the Voluntary Preparedness Components of the *SES Plan* facilitate business continuity by allowing movement of eggs and egg industry products from non-infected premises within an avian influenza Control Area. The Voluntary Preparedness Components of the *SES Plan* were previously known as the

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Federal and State Transport Plan for Eggs (FAST Eggs Plan). The objectives of the Voluntary Preparedness Components of the *SES Plan* are as follows:

- ◆ Minimize the risk of exposure of poultry flocks to HPAI and thereby limit the spread of HPAI during an outbreak.
- ◆ Provide a high degree of confidence that whole shell eggs entering market channels for human consumption are free of HPAI virus.

During a response to an HPAI outbreak, animal health regulatory officials will need time to evaluate premises' biosecurity practices, determine exposure to dangerous contacts with Infected Premises, and conduct daily surveillance of flocks in the Control Area. Egg producers can voluntarily participate in the Voluntary Preparedness Components of the *SES Plan*. Participation will reduce the time expected to meet the criteria for moving eggs and egg products into market channels. The Voluntary Preparedness Components of the *SES Plan* has four components for an egg premises that chooses to enroll voluntarily prior to an outbreak:

- ◆ Compliance with the biosecurity checklist for egg production premises and completion of audits: 45 measures that can be implemented prior to or during an outbreak that would reduce the risk of introducing HPAI virus onto production premises.
- ◆ Location verification using GPS coordinates
- ◆ Training on completion of the epidemiological questionnaire and entry of flock data into the secure SES data portal
- ◆ Training on procedures to collect and submit samples for the active surveillance program using RRT-PCR.

An SES data portal is also available for use during an HPAI outbreak by State and Federal regulatory officials to collect mortality data, monitor production parameters, record the results of the epidemiologic questionnaire, and record RRT-PCR results from *all* egg farms in a Control Area (with or without prior enrollment in the Voluntary Preparedness Components of the *SES Plan*).

By enrolling prior to an outbreak, premises can get preapproval from the SAHO or Assistant District Director (formerly Area Veterinarian in Charge) for their biosecurity practices. The specific biosecurity practices can be audited and premises-specific GPS location data collected. Farm personnel can be trained to collect oropharyngeal samples and have an opportunity to complete at least one trial exercise to determine the time required to collect samples on the farm and to travel to a veterinary diagnostic laboratory. Farm managers can have prepositioned resources, including an instructional DVD and written materials describing oropharyngeal sample collection, BHI tubes, sampling swabs, veterinary diagnostic

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laboratory submission forms, directions to the veterinary diagnostic laboratory, and an SES data portal account where they can enter daily production data.

Egg producers can enroll through their State coordinator. Until a State coordinator is identified in each State with interested egg producers, the biosecurity checklist and an oropharyngeal swabbing video can be viewed at [www.sesdataportal.org](http://www.sesdataportal.org) to enhance preparedness efforts.

## S6.2 BIOSECURITY CHECKLIST FOR EGG PRODUCTION PREMISES AND AUDITORS

The Voluntary Preparedness Components of the *SES Plan* “Biosecurity Checklist for Egg Production Premises and Auditors” contains 45 important biosecurity measures that, if fully implemented, help reduce the risk of introducing HPAI virus onto egg production premises (see [www.sesdataportal.org](http://www.sesdataportal.org)). These biosecurity measures were based upon the input of a panel of poultry veterinarians (with expertise in egg production and avian influenza), as well as State and Federal epidemiologists, egg producers, universities, and regulatory agencies.

Implementation of these biosecurity measures prior to an outbreak will significantly reduce the likelihood that the HPAI virus will be introduced onto egg production premises:

- ◆ Voluntarily participating egg producers will provide “Yes” or “No” responses to biosecurity statements on the checklist. “Yes” means that the biosecurity measure is part of a farm’s written biosecurity plan and the policy is enforced. “No” means that the biosecurity measure is not a company policy, and the premises do not qualify for the Voluntary Preparedness Components of the *SES Plan* until the deficiency is corrected. To participate in the Voluntary Preparedness Components of the *SES Plan*, egg production premises must utilize *all* biosecurity measures on the checklist.
- ◆ An *auditor* will be assigned to participating egg premises by the SAHO after consultation with the Assistant District Director. An official auditor must be a State or Federal animal health official (or another individual) deemed qualified by the SAHO and Assistant District Director.
- ◆ *Auditors confirm the validity of biosecurity statements* checked “Yes” and submit a written report of their findings to the SAHO, Assistant District Director, and manager of the egg premises. The SAHO and Assistant District Director use this information to determine whether the level of biosecurity is sufficient to qualify the premises for participation in the Voluntary Preparedness Components of the *SES Plan*.

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- ◆ An approved *audit, no more than 6 months old*, must be on file with the SAHO and Assistant District Director for egg premises to participate in the Voluntary Preparedness Components of the *SES Plan*. The SAHO and Assistant District Director must decide whether the biosecurity level of egg production premises is sufficient to qualify the premises for participation in the Voluntary Preparedness Components of the *SES Plan* (pass) or not (fail). If premises fail a biosecurity audit, the reasons for failure will be provided in writing to the farm manager. Farm managers then have the option of taking corrective action and requesting another audit.
  - ◆ When possible, the *same auditor will visit the same egg production premises* on subsequent visits so that, over time, the auditor will become familiar with the egg operation and the farm manager will become familiar with the auditor.
  - ◆ The *initial audit* will require an *on-site visit* to the egg production premises by the auditor. To protect the biosecurity of the egg operations, *auditors* will survey the outside areas on the premises and egg processing areas but *will not enter the chicken houses*. *Subsequent audits* will consist of a meeting between the auditor and the farm manager at an *off-site location* to review records followed by a visual inspection of the outside areas of the premises by the auditor, who will remain inside a vehicle owned by the egg farm.
  - ◆ *Audits are premises specific*. Premises vary in size, from a single, standalone chicken house to multiple chicken houses and out buildings at a modern in-line egg production complex. If a business produces eggs at multiple locations, each participating location must have a separate audit.
  - ◆ *GPS location*. The longitude and latitude for each participating egg operation will be determined by a State or Federal employee currently trained to use a GPS receiver. A Premises Identification Number (PIN) may be assigned by the State in which the egg premises are located. Premises registration forms are available on each state's department of agriculture website.
  - ◆ At least one animal health official from each State with participating egg producers will be expected to attend *annual training sessions at a USDA-approved training program for egg premises auditors* to (1) review the clinical signs and lesions associated with avian influenza; (2) discuss interpretation of data pertaining to feed consumption, water consumption, and egg production; and (3) promote uniformity of audits for the nation's egg industry.

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## S6.3 LOCATION VERIFICATION OF PREMISES FOR THE VOLUNTARY PREPAREDNESS COMPONENTS OF THE SES PLAN USING GPS COORDINATES

Egg production premises participating in the Voluntary Preparedness Components of the *SES Plan* will register with the State coordinator. The longitude and latitude for each participating egg operation will be determined by a State or Federal employee trained to use a GPS receiver. Participants may opt to register their premises in the Voluntary Preparedness Components of the *SES Plan* online or by mailing or faxing forms to their State coordinator.

## S6.4 EPIDEMIOLOGY QUESTIONNAIRE AND FLOCK DATA

In the event of an outbreak of HPAI, an epidemiology questionnaire, previously provided to managers of participating egg operations, will provide information that will allow foreign animal disease investigators to determine whether the premises enrolled in the Voluntary Preparedness Components of the *SES Plan* have been exposed directly or indirectly to birds and other animals, products, materials, people, or aerosol from the IP. A proposed version of the epidemiology questionnaire is available at the end of this chapter and at [www.sesdataportal.com](http://www.sesdataportal.com).

At the start of an incident, in addition to the epidemiology questionnaire, participating facilities will submit daily information on mortality and egg production for the preceding 7 days for each chicken house on the premises. Participating premises managers will report significant unexplained changes in feed consumption, water consumption, or behavior. This data will be submitted directly to the data portal daily and will be available to the Incident Commander while the premises enrolled in the Voluntary Preparedness Components of the *SES Plan* are in a Control Area.

## S6.5 ACTIVE SURVEILLANCE PROGRAM (RRT-PCR TESTING)

Potential presence of H5 or H7 avian influenza virus infection on premises enrolled in the Voluntary Preparedness Components of the *SES Plan* will be monitored by requiring chickens from each house on the farm to be tested prior to product movement and found to be negative by the RRT-PCR test. In addition, chickens in these flocks must be free of clinical signs of disease and the flocks must have no unexplained increase in mortality or decline in egg production or feed consumption. See Chapter 1 of the *SES Plan* for more surveillance information.

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## S6.6 SECURE EGG SUPPLY DATA PORTAL

Data from the biosecurity checklist, audits, and GPS coordinates can be entered into the database prior to the event. The responses to the epidemiology questionnaire flock production data, and daily RRT-PCR test results are only entered at time of outbreak. This information will be stored in a database administered by each participating State with support from Iowa State University's CFSPH. All registered egg producers will have a unique login and password to access the data portal. In the event of an outbreak, the egg producer should complete the online epidemiology questionnaire and enter their premises-specific flock production data. ICs will be able to access this information in the event of an HPAI outbreak to help determine issuance of movement permits.

## S6.7 PUBLICATIONS

A review of scientific literature addressing avian influenza in chicken eggs is available in the following paper: Spickler, A. R., D. W. Trampel, and J. A. Roth (2008), "The onset of virus shedding and clinical signs in chickens infected with high pathogenicity and low pathogenicity avian influenza viruses," *Avian Pathology* 37:555-577.

A summary of the need for the measures in the Voluntary Preparedness Components of the *SES Plan* is available in Trampel, D. W., J. T. Zack, T. Clouse, D. Bickett-Weddle, G. B. Brown, V. Rao, H. S. Hurd, G. I. Garris, and J. A. Roth (2009), "A federal and state transport plan for movement of eggs and egg products from commercial egg production premises in a high-pathogenicity avian influenza control area," *Journal of the American Veterinary Medical Association* 235:1412-1419.

On the basis of the science provided by the draft *Interagency Risk Assessment for the Public Health Impact of Highly Pathogenic Avian Influenza Virus in Poultry, Shell Eggs, and Egg Products* compiled by FSIS in 2008 and the daily RRT-PCR testing required as surveillance within an HPAI Control Area, the Egg Sector Working Group deemed the Geospatial Risk Estimate (GRE) described in the above publication unnecessary as a permitting decision tool.

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# S6.8 EPIDEMIOLOGY QUESTIONNAIRE

## SECURE EGG SUPPLY PLAN HPAI EPIDEMIOLOGY QUESTIONNAIRE

Date: \_\_\_\_\_

Business/farm name: \_\_\_\_\_

Primary contact: \_\_\_\_\_

Business address: \_\_\_\_\_

Business telephone number: \_\_\_\_\_

Cell telephone number: \_\_\_\_\_

Fax number: \_\_\_\_\_

Home telephone number: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Secondary contact: \_\_\_\_\_

Business address: \_\_\_\_\_

Business telephone number: \_\_\_\_\_

Cell telephone number: \_\_\_\_\_

Fax number: \_\_\_\_\_

Home telephone number: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Farm Address (911 and Animal Location): \_\_\_\_\_

City: \_\_\_\_\_ Zip code: \_\_\_\_\_

County: \_\_\_\_\_

Township: \_\_\_\_\_

Range: \_\_\_\_\_

Section: \_\_\_\_\_

GPS coordinates (decimal degrees): \_\_\_\_\_

Premises identification number: \_\_\_\_\_

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The purpose of this epidemiological questionnaire is to help the Incident Management Team determine a premises' classification: Contact Premises, At-Risk Premises, or Monitored Premises. Additional information will be considered (e.g., daily PCR testing and production data) when decisions regarding movement permits are made.

### Employee Risk Factors

1. Do any of your personnel work at other poultry premises or have they visited other poultry premises, hatcheries, processing plants, or poultry slaughtering facilities within the past 21 days?  Yes  No
  - a) If Yes, what premises? \_\_\_\_\_
2. Do any of your workers live with someone who works at another poultry farm, hatchery, processing plant, slaughter facility or rendering plant?  Yes  No
3. Have you hired new personnel during the past 21 days?  Yes  No
  - a) If Yes, did they work for another poultry premises before you hired them?  Yes  No
  - b) If Yes, where did they work prior to coming to your premises? \_\_\_\_\_
4. Has an employee from this premises visited a rendering plant within the past 21 days?  Yes  No
  - a) If Yes, what plant? \_\_\_\_\_
  - b) If Yes, did the person clean and disinfect his/her vehicle before returning to your premises?  Yes  No
  - c) If Yes, did the person change outer clothes before returning to your premises?  Yes  No
  - d) If Yes, did the person disinfect footwear or change into footwear dedicated to this premises upon return?  Yes  No

### Biosecurity Risk Factors

5. Are you enrolled in the Voluntary Preparedness Components of the SES Plan?  Yes  No
  - a) If Yes, date of last audit \_\_\_\_\_
6. Have migratory waterfowl been seen on the ground or water within 0.62 m (1 km) of your buildings containing chickens in the last 21 days?  Yes  No
  - a) If Yes, please describe: \_\_\_\_\_
7. Have free flying birds been observed in the chicken houses in the past 21 days?  Yes  No
8. Is feed protected from exposure to feces from wild birds, waterfowl, rodents and/or wild mammals?  Yes  No
9. Is water protected from exposure to feces from wild birds, waterfowl, rodents and/or wild mammals?  Yes  No



10. Which of the following describes this farm's usual carcass (daily mortality) disposal method?  
(Mark ALL that apply)

- |   |                                  |                                   |
|---|----------------------------------|-----------------------------------|
| <input type="checkbox"/> Rendering              | <input type="checkbox"/> on-farm | <input type="checkbox"/> off-farm |
| <input type="checkbox"/> Composting             | <input type="checkbox"/> on-farm | <input type="checkbox"/> off-farm |
| <input type="checkbox"/> Burial                 | <input type="checkbox"/> on-farm | <input type="checkbox"/> off-farm |
| <input type="checkbox"/> Incineration           | <input type="checkbox"/> on-farm | <input type="checkbox"/> off-farm |
| <input type="checkbox"/> Other (specify: _____) |                                  |                                   |

11. Do you dispose of dead birds from other farms?  Yes  No

a) If Yes, please provide more details: \_\_\_\_\_

12. Have you introduced chicks onto this farm in the last 21 days?  Yes  No

a) Was the breeding flock serologically tested for avian influenza?  Yes  No

13. Did any birds move off this farm and then return to the farm (e.g., markets, shows, farmers' market, fair) in the past 21 days?  Yes  No

a) If Yes, please describe: \_\_\_\_\_

### Trace Back Information

In the last 21 days, did the following movements **ONTO** the farm occur? If yes, please provide as much accurate information as possible for each unique source. You can add more rows by 'right clicking' in the box and selecting "Insert > Insert Rows Below".

14. Eggs (e.g., sideloading)  Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel entered chicken house? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Movements ONTO the farm (continued)**

15. Live Birds (including replacement pullets or backfilling pullets)  Yes  No  Don't know

Source/ name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)	Were the chickens RRT-PCR tested for avian influenza prior to moving onto your farm? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

16. Feed trucks  Yes  No  Don't know

Source/name	Truck and equip- ment C&D before entering? (Yes/No)	Truck and equip- ment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

17. Fresh litter/bedding  Yes  No  Don't know

Source/name	Truck and equip- ment C&D before entering? (Yes/No)	Truck and equip- ment C&D when leaving? (Yes/No)	Personnel enter bird housing/ (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Movements ONTO the farm (continued)**

18. Personnel or equipment used to handle/haul manure and/or used litter?

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

19. Catch/vaccination/beak trim crews

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

20. Off-site Renderer

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

a) Did the driver leave the vehicle while on this premises?  Yes  No  Don't know

b) If Yes, what area of the premises did he or she enter? \_\_\_\_\_

c) Was driver required to wear outer clothes and foot wear provided by this premises?  Yes  No  Don't know

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**Movements ONTO the farm (continued)**

21. Company veterinarian/service technician

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

22. Non-company veterinarian/consultant

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

23. Service personnel (e.g., construction, gas, plumbing, pest control)

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**Movements ONTO the farm (continued)**

24. Customer/buyer/dealer

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

25. Other poultry producer

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

26. Any other visitor (friend/neighbor)

Yes  No  Don't know

Source/name	Truck and equipment C&D before entering? (Yes/No)	Truck and equipment C&D when leaving? (Yes/No)	Personnel enter bird housing? (Yes/No)	Entered in visitor log? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Trace Forward Information

In the last 21 days, did the following movements **OFF** the farm occur? If yes, please provide as much accurate information as possible for each unique off-farm location. You can add more rows by 'right clicking' in the box and selecting "Insert > Insert Rows Below".

27. Eggs

Yes  No  Don't know

Destination/ name	Truck and equipment C&D when leaving? (Yes/No)	Truck and equipment C&D before return- ing? (Yes/No)	Personnel enter bird housing? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

28. Live Birds  
know

Yes  No  Don't

Off-farm location/ name	Truck and equipment C&D when leaving? (Yes/No)	Truck and equipment C&D before returning? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

29. Feed trucks (that haul feed originating on your premises and deliver feed to off-farm locations.

This question does not refer to feed trucks that bring feed onto your premises from other off-farm locations which was previously covered in question 15).  Yes  No  Don't know

Off-farm location/ name	Truck and equipment C&D when leaving? (Yes/No)	Truck and equipment C&D before returning? (Yes/No)	Personnel enter your bird housing? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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**Movements OFF the farm (continued)**

30. Farm personnel or equipment used to haul manure/used litter to off farm locations.

Yes  No  Don't know

Off-farm location/ name	Truck and equipment C&D when leaving? (Yes/No)	Truck and equipment C&D before returning? (Yes/No)	Personnel enter your bird housing? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

31. Farm personnel or equipment used for catch/vaccination/beak trim at off-farm locations.

Yes  No  Don't know

Off-farm location/ name	Truck and equipment C&D when leaving? (Yes/No)	Truck and equipment C&D before returning? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

32. Farm personnel or equipment used for off-farm carcass disposal.

Yes  No  Don't know

Off-farm location/ name	Truck and equipment C&D when leaving? (Yes/No)	Truck and equipment C&D before returning? (Yes/No)	Personnel enter your bird housing? (Yes/No)

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_