Introduction

This is a program designed for the handling of H5 and H7 LPAI in commercial poultry in Georgia. The 9CFR designates the NPIP Official State Agency of Georgia as the lead agency for the Initial State Response and Containment Plan for LPAI (H5 and H7). This program includes all NPIP recommended contents and follows 9CFR recommended headings.

The program is written for easy reading and flow. It has many annexes for reference. It is designed to be used as a guide only. Many of the actions can be modified as the outbreak unfolds (size of zones, timelines, etc.).

PREPARING FOR AN OUTBREAK

1. Standing Emergency Disease Management Committee

The current Poultry Technical Advisory Committee, because of its mission of industry management and response to any poultry health issue in the state, is designated as the Standing Emergency Disease Committee (SEDC) for the purposes of this Plan. The PTAC communicates by conference calls or meetings at least once a month, and has been involved and will continue to be involved in table top and field exercises for AI preparedness.

Ad hoc members are: AVIC, Dr. Julie Gabel, Dr. John Glisson, Mr. Mike Giles and a representative from the company with the first case (if not already on the committee).

Louise D.-Zavala (770) 540-3797 GPLN co-chairman
Ben Johnson (706) 254-8386 GPLN co-chairman
John Smith (706) 499-9227 BROILER
David McEver (770) 540-4133 TABLE EGG
Donnie Willburn (770) 316-2198 BROILER
Tony Gravitt (770) 654-7202 BROILER
Steve McCarter (404) 915-8740 BROILER
Scott Cochran (706) 491-8731 BROILER
Carter Black or delegate (404) 656-3671 GDA
Julie Gabel (678) 618-5020 GDPH
John Glisson (PDRC) or lab delegate (Ath or Tif) 706-542-1904

As the SEDC manages the first case and the outbreak, it makes decisions concerning repopulation, movement of poultry and poultry products, and releases of quarantine status. The Industry representatives on the Committee are key to assist agencies with their decisions.

2. Minimum Biosecurity Plan Followed by all Producers

All company farm biosecurity documents are on file at the GA Poultry Federation. These documents contain at least the minimum requirements below:

MINIMUM FARM BIOSECURITY

1. Keep all animals that are not chickens out of the chicken house.
2. Always use dedicated footwear to work on the farm.
3. Use only clean tools and equipment on the farm. Clean and disinfect any equipment that is to be shared between poultry farms.
4. Use a different vehicle on and off the farm.
5. Visits to other poultry farms are made only when absolutely necessary. Shower and change before coming back to your own birds.
6. Contact with non-commercial poultry or wild birds is kept at a minimum also. Shower and change before coming back to your own birds.
7. Dispose of dead poultry through approved methods only.
8. Call your serviceman immediately with any concerns with elevated mortality or clinical signs of disease
9. When the birds are sick, all non critical visits to the houses are stopped.
10. Keep visitors to a minimum; entry into the house is forbidden unless approved by the company or the grower. There is a sign to that effect on the doors or at a prominent place on the farm.
11. All visitors wear minimum biosecurity gear (coveralls and boots). Without it, they are not allowed in the houses. The grower should have extra sets of coveralls and plastic boots available for visitors.
12. Visitors and servicemen always follow a traffic flow: from young to old birds, healthy to sick birds.

3. Provisions for Adequate Diagnostic Resources

Testing for AI (ELISA, AGP, Antigen Capture Immunoassays (ACIA), and rtRTPCR is primarily conducted by the Oakwood Laboratory. It may also be conducted at the PDRC, Athens and Tifton Diagnostic Laboratories. The NVSL is the reference laboratory for confirmation of a case.

4. Specific Procedures for Handling and Investigation of Suspected Cases of H5/H7 LPAI

Follow up on a suspect case: by COMPANY

Company Isolation (Quarantine if warranted) Annex 3p
Retest Procedures by GPLN
1. Use prepared diagnostic kit (see annex 7a for contents). Test 30 birds per house on the premise (30 blood samples and 30 OP or tracheal swabs); Submit to Oakwood Laboratory;
2. Preliminary epidemiological investigation with the grower is started at this time

Releasing Company Isolation by GPLN
1. If the result is negative, the company is immediately notified by Laboratory personnel.
2. All normal business resumes for the company.

MANAGING AN OUTBREAK
Presumptive Positive or Positive Case:
Inform the Senior coordinator of the NPIP (by GPLN)
Inform neighboring state OSAs/state veterinarians (Dr. Black). Contact the local county EMA if deemed necessary.

Full Activation of the PTAC (members within 50 miles of case): Meetings on a daily basis or as needed.
Forms to complete:
- Appraisal form 123 (3n)
- MOU Flock plan (3l)
- Compliance agreement birds (3f)
- Compliance agreement eggs (3g)
- Cooperative agreement surveillance (3k)

The designated appraiser (7e) visits the flock before the euthanasia is started. The affected company is likely to start the process of depopulation of the flock right after appraisal because speed is of the essence at the beginning of the outbreak. There will be an embedded official (7f) with the company for documentation and support. The effort will be focused on extremely rapid intervention. The embedded official will ensure that all procedures are carried out according to the plan.

First Meeting/Conference Call
Preparation of meeting/Call
1. Summarize lab findings/preliminary epi findings
2. Activate GIS, draw 2, 6 and 20 mile zone as appropriate (these may be modified as risk is assessed by PTAC), with farms labeled on the map and listed
3. Contact companies to get farm status and/or age of birds

Agenda of meeting:
1. Summarize lab findings
2. Summarize quarantine restrictions for the farm
3. Summarize immediate actions and status of forms
4. Summarize status of farms in zones
5. Summarize movement restrictions for the 6 and 20 mile zones
6. Inform of appraiser schedule
7. Decisions on the disposition of the flock (FLOCK PLAN) are made: euthanasia, disposal, C&D, security, vaccination (as appropriate);
8. Surveillance. By Industry teams. Start within 24 hours, follow priorities
9. Consider a request that non-commercial assemblages that involve poultry in GA be cancelled. By GDA

Follow up on an Index Case:
Farm: Implement individual flock plan
Zone 6: Implement Zone Plan

<table>
<thead>
<tr>
<th>Zone 6 Plan</th>
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<tbody>
<tr>
<td>1. Stop all house clean out and litter spreading</td>
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<tr>
<td>2. Stop all servicing</td>
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<tr>
<td>3. No restocking of empty farms within Zone 6</td>
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<tr>
<td>4. Essential servicing (feeding birds) done at the end of the day, followed by truck sanitation.</td>
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<tr>
<td>5. Establish control point if deemed necessary.</td>
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5. Specific Procedures for Reporting Test Results to APHIS
Communications by the testing laboratory to the State Veterinarian and AVIC start as soon as a sample is sent to NVSL.

6. Quarantine Measures for Presumptive and Confirmed Index Cases
Quarantine
A quarantine is placed on the farm by GDA as soon as the case is confirmed positive by NVSL. The quarantine restricts movement of animals and animal products off the farm.

Quarantine Release
Farms will be considered for release 30 days after C&D. Environmental swabs will have tested negative to virus isolation within 2 weeks of release.

7. Provisions for Developing Flock Plans for Infected and Exposed Flocks

Flock Plan by COMPANY, conducted with embedded official.

Security AND Biosecurity
Security: The entry to the farm will be secured while depopulation is on-going. This will be done by the company and overseen by GDA, USDA or local law enforcement (if needed), who will see that the necessary equipment and personnel are available for this task.

Biosecurity
1. STOP ALL OFF-PREMISES BIRD DISPOSAL.
2. ESTABLISH A PREMISE CONTROL POINT (PCP): The company will be responsible for establishing a biosecurity station: a pressure washer will be present at the farm gate for washing vehicles and equipment upon exiting the premise. Backup: GDA (If insufficient, additional processing of the vehicle can be done at the Zone 6 Biosecurity station if established.

Appraisal
The appraisal process includes an inventory taken by the appraiser before the birds are euthanized

Epidemiological Investigation
The investigation is started by the veterinarian visiting the farm for sampling. It is completed by a designated poultry veterinarian.

Euthanasia (in accordance with AVMA guidelines)
GOAL: Euthanize within 24 hours of confirmation
Details on Euthanasia in Annex 4

Disposal (In accordance with GDA guidelines) – Annex 5
C&D (In accordance with LPAI Plan) – Annex 6
Repopulation (In accordance with Zone Plan)

8. Euthanasia and Disposal of Infected Flocks and Contaminated Materials

EUTHANASIA APPROVED METHODS:
CO2 Euthanasia
Nat. Welders supply [www.nwsco.com]
Airgas [www.airgas.com]
Foam euthanasia
Cervical Dislocation

DISPOSAL METHODS:
1. Burial
2. Trench burial (where water table is high)
3. Incineration
4. Composting in house
5. Composting outside
6. Landfill
7. Rendering
8. Combination of above methods
Details on disposal methods in Annex 5

9. Cleaning and Disinfection of Premises, Repopulation, and Monitoring after Repopulation

Cleaning and Disinfection: Details in Annex 6
Restocking: The goal is: No repopulation Zone 6 until 30 days after the last positive case was identified.

Monitoring after Repopulation
When repopulation starts, all Zone 6 farms will be monitored every 2 weeks for one month, and monthly thereafter for a period of one more month. Ninety days after the last positive case, all farms return to NPIP active and passive surveillance mode, providing no other positive cases were found.

10. Appropriate Control/Monitoring Zones, Contact Surveys, and Movement Restrictions

Establishment of Zones

Zone 2 (2 mile (3km) around case)
Zone 6 (6 mile (10km) around case)
Zone 20

Contact Surveys
Survey for non commercial birds within the 2 mile zone. Test schedule will be 30 blood samples per premise and 10 OP/T swabs from live birds and, if available, OP/T swabs from mortality (by GDA).

Movement Restrictions

YES: Sows to processing, if placed inside Zone; C&D at plant
Hatching eggs to hatchery, if hatchery is Inside Zone;
C&D truck and equipment at hatchery
During the stamping out, at the beginning of the outbreak, NO BIRDS
MOVE UNIL TESTED NEGATIVE.

NO: NO PLACEMENT of any bird until at least 4 weeks after the last positive test.

YES: Breeder to processing: after negative barrel result within 48 hours of movement.
EGGS: no movement until scope of outbreak is known. Then movement established at PTAC’s discretion.
Hatching Eggs: from negative flock to cleaned and disinfected racks and flats. Tab lifts: from negative flock to cleaned flats and disinfected racks.
Disinfected racks at plant.
Pullet: after negative barrel and serum result within 48 hours of movement.
C&D truck and cages at destination farm.
Breeders: after negative barrel and serum result within 48 hours of movement,
C&D trucks and coops at feed plant.
Infectious bird within the Zone: Wash bus on the way out of the Zone.

NO: Any birds tested positive.
11. Monitoring Activities in Control Zones

Priorities for testing within Zones:

1. Farms with a link to the suspect flock: within 24-48 hours
2. Flocks with high mortality: Within 24-48 hours (>3/1000/day in broilers, >5/day/house in breeders, drop in egg production or feed refusal, 0.2-0.6/1000/day in commercial layers)
3. ALL birds ready to go to processing within 6 mile Zone. Only negative flocks move
4. 2 mile Zone: Start within 24 hour of initial diagnosis
5. 6 mile Zone: Start within 3 days of initial diagnosis (if >21 days old)
6. RETEST every 7-10 days; up to 30 OP/T swabs/house (Barrel)
7. 20 mile Zone: Pre-movement testing (pullets, breeders, spike males, broilers).

RETEST every 7-10 days;
NUMBERS: Minimum 10 samples/house, Minimum 30 samples/premise unless otherwise noted in the table.
BROILERS>21 days/Barrel.
ADULT BIRDS: Barrel, OP/T swabs to make up

Release Zone surveillance after a minimum of 3 negative tests on each farm on the Zone after the last positive case has been depopulated.

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<tr>
<th></th>
<th>Blood</th>
<th>OP/T swabs live birds</th>
<th>Barrel</th>
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<tbody>
<tr>
<td>Confirmation of case</td>
<td>30/house</td>
<td>30/house</td>
<td>n/a</td>
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<tr>
<td>Zone broilers over 21 days</td>
<td>n/a</td>
<td>(√) (make up)</td>
<td>(√) (if insufficient number of dead birds, make up sample with OP/T swabs)</td>
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<tr>
<td>Zone adult birds</td>
<td>√</td>
<td>(√) (make up)</td>
<td>(√) (if insufficient number of dead birds, make up sample with OP/T swabs)</td>
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<tr>
<td>Out-of-the-6-mile-Zone</td>
<td>√</td>
<td>√</td>
<td>n/a</td>
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<td>Adult birds for mvt and</td>
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<td>Processing age Broilers</td>
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<tr>
<td>Non Commercial birds</td>
<td>30/flock</td>
<td>30/premise (Make up)</td>
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12. Approval and Use of Vaccines

GA would consider vaccination in some extreme circumstances where very large numbers of confined poultry would be found positive such as commercial layers. GA will consider using vaccine as a means towards eradication, and NOT as a sole control method.

The process of approval will include concurrence of the State Veterinarian and approval of the Deputy Administrator of USDA for H5 and H7 vaccines as part of the eradication program.

Forms needed:
- Transfer of vaccine (3j)
- Covering cost of vaccination (3i)

Vaccine would be purchased and administered by the company and be under the control and permitted for use by the State of GA. The Federal and State role in the vaccination process will be limited to oversight and monitoring.

13. Plans for H5/H7 Negative Flocks that provide for Quarantine, Testing, and Controlled Marketing

The GA plan will consider preemptive culling of flocks within 2 miles of the first case. Alternatives are slaughter of negative flocks within 24 hours of testing negative, or continuing monitoring until the Zone is cleared. Controlled marketing will only be considered under extreme circumstances.

14. Public Awareness and Education Programs

All companies are on a list serve originating from GPLN and they are sent weekly (or as needed) information about AI and END in the US and the World. The USDA personnel and State Veterinarian’s Office also update the industry about animal diseases in the State. Industry members are continually updated on GA Poultry disease information by the Poultry Laboratory Network. Information about AI and END is regularly distributed at auctions and sales.

15. Information

Prior to any official report, all inquiries go to GDA.
With a non confirmed result, companies that are close to the case may be notified (decision made on a case by case basis).
The non confirmed result information needs to be treated confidentially.
Notification of poultry industry of first case: State veterinarian or delegate (email or conference call).
After the first report, information flows from SEDC to Industry through list serve.
For Press: Information flows from SEDC Information person to GDA to Press
Secure information flow: From growers, public, etc to SEDC (analysis of information). SEDC releases one consensus message to GDA and to industry (situation report).
16. Indemnity

USDA has 100% indemnity for flocks in states that participate in the NPIP AI monitored program and that have an approved Low Path AI Containment and First Response Plan. Reimbursement will be for euthanasia, disposal and C&D. Non participants are eligible for 25% indemnity. The form in Annex 3n will be used to document expenses eligible for reimbursement. Specific rules addressing appraisals, destruction, disinfection and claims are addressed in 9CFR 53.3-11 and 9CFR 56.8.

17. Definitions and Acronyms

AI: Avian Influenza
AVIC: Area Veterinarian in Charge
AGID: Agar Gel Immunodiffusion
C&D: Cleaning and Disinfection
CO2: Carbon dioxide
CFR: Code of Federal Regulations
ELISA: Enzyme linked Immunosorbent Assay
END: Exotic Newcastle Disease
Flu Detect: Quick diagnostic kit for the detection of AI antigen
GDA: Georgia Department of Agriculture
GIS: Geographic Information Systems
GDLN: Georgia Poultry Laboratory Network
H5, H7: Hemagglutinin 5 or 7
LPAI: Low pathogenic Avian Influenza
NPIP: National Poultry Improvement Plan
NVSL: National Veterinary Services Laboratory
OP/T: Oro-pharyngeal or tracheal (swabs)
PCR: Polymerase Chain Reaction
PTAC: Poultry Technical Advisory Committee
RNA: Ribonucleic acid
rRT-PCR: Real time Reverse transcriptase PCR
USDA: United States Department of Agriculture

Case definitions

Inconclusive result:
An AGID positive not yet confirmed by NVSL. A positive AGID result will always be repeated before it is considered a suspect. An antigen capture immunosassay (such as FluDetect, Binax or Directigen) that is positive but not yet confirmed by virus isolation or rRT-PCR

Positive result:
A confirmation of positive AGID results by NVSL or a positive virus isolation or rRT-PCR result by NVSL.

Positive case definition (H5 H7 LPAI infection):
A bird will be considered to be infected with H5-H7 LPAI if:

a. H5 H7 virus has been isolated and identified as such from poultry or products derived from poultry, OR
b. Viral antigen or viral RNA specific to H5 H7 subtype of AIV has been detected in poultry or a product derived from poultry OR
c. Antibodies to H5 or H7 subtype of AIV that are not the consequence of vaccination have been detected. In the case of isolated positive serological results, H5 H7 LPAI infection may be ruled out on the basis of a thorough epidemiological investigation that does not demonstrate further evidence of H5 and H7 LPAI infection

GA LPAI Avian Influenza H5 and H7 State First Response and Containment Plan

18. GA AI Surveillance Programs

GA ACTIVE SURVEILLANCE
Broilers: 11/flock within 21 days of processing
Breeders: 30/flock every 90 days

GA PASSIVE SURVEILLANCE
All cases of birds submitted alive to the Laboratory for any reason: AGP or ELISA OS test
All cases of unexplained high mortality, respiratory disease, VLT suspects: ACIA (antigen capture immunoassays)

19. Annexes

1. Biosecurity
   a. Biosecure deliveries
   b. Biosecure servicing
   c. Movement of poultry and poultry products
   d. Premise control point (PCP)
2. Contacts
   a. Industry
   b. Laboratory
   c. GDA
   d. USDA
   e. Landfills
   f. Rendering Plants
3. Forms
   a. NVSL submission form
   b. Situation report
   c. Epi questionnaire
   d. Lab submission form for GPLN
   e. Utilities form letter
   f. Compliance agreement for euthanasia and disposal
   g. Compliance agreement for destruction of eggs
   h. Compliance agreement for C&D
   i. Cooperative agreement for payment for vaccine administration
   j. Cooperative agreement for transfer of vaccine
   k. Cooperative agreement for the payment of surveillance costs to the OSA
l. MOU Flock Plan
m. PCP Form
n. Appraisal form 123
o. CVI for movement of poultry from LPAI
p. Company isolation: Letter of notification
q. Euthanasia to proceed
r. Estimated costs and useful numbers
s. Indemnity request
4. Euthanasia
   a. CO2: Breeder floor
   b. CO2: Broiler floor
   c. CO2: Enclosures
   d. CO2: Whole House
   e. CO2: Carts
   f. CO2: backyard
   g. Foam: Trailer
   h. Foam: Kifco
5. Disposal
   a. GDA animal mortality summary
   b. Disposal by county
   c. Composting summary
   d. Moving materials off premises
6. Cleaning and Disinfection
   a. GDA C&D document
7. Miscellaneous
   a. Supplies available at Oakwood
   b. Blood and Barrel Surveillance SOGs
   c. PPE
   d. GA rule for poultry movement from an LPAI state
   e. Approved appraisers
   f. Embedded official
   g. Trade issues