Purpose
The purpose of the on-line Flu II exercise is to enhance the preparedness and communication among regulatory, public health and zoological personnel in Illinois to respond to a Foreign Animal Disease outbreak in a captive wildlife population. The activity will fulfill an all-hazards approach to response to any disaster or emergency by emphasizing the use of the Incident Command System.

The internet exercise scenario describes a situation which potentially could occur in each Illinois institution: a collection specimen may be exposed to disease via an outside source. All participating institutions have some avian species which spend some of their time in outside enclosures. The Exercise Planning Team realizes that the risk in each institution is likely not the same due to various differences in collection species, exhibit design, etc. These differences shouldn’t affect the ‘play’ for any of the participants. During the course of play, each institution/player should think about the various agencies, and their roles and responsibilities, needed to effectively manage this outbreak.

Participants
The participants in the internet exercise represent zoos, State and Federal agencies and other stakeholders. The zoological players have participated in the Flu II ICS 100&200 training held in Bloomington, Illinois in June 2013, or are key personnel within their respective institutions. Zoological players come from the eight Association of Zoos and Aquariums accredited facilities in Illinois.

Listed below are all the agencies that will be consulted during the exercise. Some may be observers only but will be able to view the discussion. Additionally, they will be able to respond to players but ask confidential questions of the exercise directors and communicate with each other. These roles will be filled by actual employees or by agency representatives. There may be more than one individual who will represent USDA Animal Care, so different individuals across the country may respond (i.e. 'Animal Care' could encompass 4 people in 4 different geographic locations).
Mission
The Flu at the Zoo projects are dedicated to preparing the zoological community for disease incidents using an all-hazards approach. The exercise will allow application of emergency management concepts explored during ICS training and allow practice use of ICS in a ‘low stress’ environment. An additional goal of this project is to assess acceptability and ease of use of an internet-based system to conduct an exercise for the zoological community.

Exercise objectives
At the conclusion of this internet exercise, the Planning Team will be able to:
- Assess the participant’s basic knowledge of the use of an ICS approach for organizing a disease response
- Confirm the communication streams and systems that are expected to be utilized between agencies involved in an outbreak
- Determine the acceptability and ease of use of internet-based exercises within the zoological community

Exercise participants will be able to:
- Practice skills learned from participating in ICS 100&200 courses
- Share ideas with one another on facility plans for managing disease in their collections

Exercise structure
The exercise is designed to be an interactive web-based exercise. The exercise will be conducted through an internet platform, which should allow players to participate from their home base.
Interaction will be a key feature to this exercise. The questions that will be posed to players will target knowledge about the ICS, recognizing that there may be multiple ‘correct’ answers. Just as ICS is adaptable and scalable, the implementation of ICS response could have more than one possible construct. The internet platform should allow for the posting of significant events, interjects, messages and responses in a common area which can be read by all participants. The exercise is arranged in a series of modules occurring over a 3 day period. The series follows the following timeline:

Module 1: Potential Disease Event in the Community (Day 1)
Module 2: Suspicious Outbreak in your collection (Day 1)
Module 3: Confirmed Disease within your collection (Day 2)
Module 4: Disease spread throughout the State (Day 2)
Module 5: Outbreak continues (Day 3)
Module 6: Interactive Hot Wash (Day 3)
Prior to the exercise, the Planning Team will provide directions to familiarize all players with FoodSHIELD, which is the internet platform that will be used to conduct the exercise. During the exercise, the Planning Team will post a different module every morning and afternoon. This exercise will work best if your responses are posted before the next module information is released. You will still be able to respond and review information that was shared in earlier modules, however. Participants are encouraged to ask questions during the exercise by posting them directly to the discussion. The Planning Team will attempt to get them answered as soon as possible.

**Exercise guidelines**

The exercise will be a learning opportunity for everyone participating, therefore we encourage sharing among everyone involved. This is a safe, low risk, low stress exercise and for many of the questions that may be posed during the exercise, there may be no ‘one right answer.’ Consider the following:

- **Before the exercise, become familiar with your institution’s policies, procedures and plans for managing a response to a large scale event.** You may want to refer to your own facilities’ protocols, safety procedures and those of the USDA AZA AI Outbreak Management Plan during the exercise. This document will be available for your use in the ‘Documents’ section of FoodSHIELD. This is **NOT** a test of your facility’s plans; this is just so you know where to find this information should you want to reference it during the exercise.

- **Before the exercise, become familiar with the Incident Briefing (ICS 201) Form** found in the ‘Documents’ section of FoodSHIELD. We will refer to it during the exercise.

- **Before the exercise, familiarize yourself with the “ICS Position Descriptions and Responsibilities”** document, available on the FoodSHIELD website. This document was prepared by the trainers for our Flu II training day.

- **Your responses may require you to answer as an individual and as part of a team...that is expected and encouraged.** If you are not playing with someone else from your facility, no worries; you can still answer based on your best knowledge. Remember, this exercise isn’t a test, but a learning experience.

- **There are no trick questions.** This scenario is designed to get players to think about their ICS training and how it would be useful in organizing the response to HPAI. If something is unclear, just ask for clarification from the Planning Team.

- **Try not to anticipate the ‘next steps’.** Details will be revealed through periodic exercise updates.

- **Don’t fret too much about the scenario details.** We realize that this scenario may not be possible exactly as written in each institution. That’s OK! It will still get you to think about ICS response structure.

- **Commit to playing.** Feel free to share ideas and questions with fellow exercise participants. If you have questions, post them! All questions will be useful for the other exercise participants. There are no inappropriate questions! Participation will not be terribly time consuming. Allow
yourself time both morning and afternoon to receive exercise updates and comment on posted questions. It should not take an excessive amount of time.

- **Commit to participating in the ‘live’ hot wash.** The last module will be incredibly valuable to you in getting an overall summary and to the Planning Team members for development of future exercises.

**Roles and responsibilities**

**Planning Team**
The Planning Team is omnipotent, able to view all discussions, ask questions, respond to public requests by players, etc. The Planning Team has overall responsibility for the exercise. The Team help prepare participants for play, develop post-exercise reports and disseminate the information.

The scenario will provide some basic questions for discussion but during the course of the exercise, a Planning Team member may post additional questions that will help guide participants through the exercise.

**Participants**
The targeted participants are the zoological personnel who attended the training program in June. Participants will be able to access the discussion board on the internet platform, ask questions of the agencies and directors and view their responses. Participants should have access to their own institutional plans, the ICS Field Operations Guide that was provided to players during the training, and know how to access documents from the FoodSHIELD document library. Participants are encouraged to interact with their colleagues at their institutions to answer questions but will also have the opportunity to ask questions of the Planning Team members confidentially if desired.

**Evaluators**
Evaluators will review transcripts of the exercise dialogue, or they will evaluate dialogue in real-time as the exercise is conducted. The evaluators have experience in animal emergency management and in zoological operations and will be responsible for evaluation of the exercise using Exercise Evaluation Guidelines (EEGs) specifically designed for this exercise. The Evaluation process will note strengths and weaknesses of the zoo community’s performance during the exercise and will help the Planning Team improve future exercises. The players are de-identified so no individual players’ names or their institutions will be mentioned. Suggestions to improve capabilities will be made by the evaluators and be presented in the After Action Report, which will be available on the Zoo Animal Health Network website.
Time: Mon 7 a.m. 5/6/2014

While driving into the zoo for work on Monday morning, your zoo CEO is listening to a local news radio station. The reporter begins to read a news clip about bird deaths at a local park. The announcer says:

“The VFW Chapter 123 picnic had a rough start early last weekend. Members of the chapter arrived at a local park to set up for their annual picnic and reported a number of dead or incapacitated birds around and in the pond. They promptly notified the Park district of the problem and authorities are investigating.” (Each zoo should go to the documents section of FoodSHIELD and download a map that will indicate the site of this park in proximity to your institution.)

Upon arrival in the office, your director has 3 voicemails and several emails from reporters. Has the zoo heard anything about the deaths of these wild birds? Since the park is fairly close to the zoo, the reporters felt this would be an interesting angle to explore. Before your director can get more information about this event, the phone rings again.

The CEO receives a phone call from their spouse: “Have you heard there is supposed to be a news conference about the dead birds on the pond in the park at 10 am this morning? And the Associated Press is carrying a story about some sort of virus.” A press conference is held, which includes USDA veterinarians and US Fish and Wildlife Service. They report that a highly pathogenic H5N1 has been CONFIRMED in birds found at the Park. It is not yet known if this strain of H5N1 is zoonotic.

**Developments**

1) There are unusual number of dead birds in a park not far from your zoo (refer to your map)
2) Your institution has media request for comment on these unusual deaths
3) Your institution has not had any contact with your State veterinarian or other official as of this time.
4) There is an AP story that a Highly Pathogenic Avian Influenza (HPAI) strain has been detected in these dead birds
5) It is not currently known if the strain is zoonotic

**Discussion questions:** Players, use the discussion questions below to frame a response to share. Remember, there may be no one ‘right’ answer. However, think about the training you received on ICS. If you have information you wish to share with the group, feel free to cut and paste any specific plan elements that you think would benefit the group.
1) Under these circumstances, does your zoo’s outbreak management plan call for establishing an Incident Command System?
   *We want people to think about ICS at this time as an organizational tool*

2) Which ICS positions might be established at this time for your facility? What resource do you have (provided during the June 2013 training) to assist with development of an ICS framework for incident management?
   *Answers may include just at IC, or and IC plus PIO, etc. We have provided training participants with a NIMS ICS guide (handed out at the training) and a zoo ICS template (available on the FoodSHIELD website)*

3) Who serves as your zoo’s Incident Commander if you activate a basic ICS?
   *We would like people to think about this here. The zoo director may or may not be the best person for an IC.*

4) What internal staff communication about this threat would take place at this time? What ICS position may be responsible for this? *The point is that internal dialogue should be started. An IC or Director, perhaps contract vet should consider having a situation review and share facts and need-to-know information with staff.*

5) Does your facility have several individuals identified which can serve as ICs in the event that your primary person is unavailable to serve?

6) What does your zoo do about the media requests, given the amount of information that you know at this time in the exercise? Which Command Staff position handles media requests at this time? Are messages approved by the Incident Commander? What are the specific messages or talking points to be shared at this time? With whom? *We would like players to think about if the zoo responds to media requests at this time, who is the voice of the zoo, and what do they say. Appropriate messages may be “all our animals are currently unaffected but as always they are being monitored by trained staff”, “we will be working with State Animal Health officials”, “we are in communication with AZA,” etc.*

   *At this time, the IC may be handling all of the IC, because the zoo is not yet ‘involved’ in the outbreak.*

7) What additional steps may your institution take at this time? *I would expect answers to vary here. Some institutions (LPZ included) would implement their plan to bring all their collection specimens into temporary holding indoors. In other institutions, it will vary.*
8) Who should your staff veterinarian or contract veterinarian call to get advice/scientific information? Local colleagues, avian medicine experts. What additional stakeholder groups would you consider contacting? AZA, Public health, the Animal Care inspector etc.

**MODULE 2  August 20th p.m.**

**Time:** Tuesday 7 a.m. 5/7/2014

The day after hearing the news about HPAI detected in your local park, your lead keeper arrives at your zoo, and notices 3 birds that routinely have outdoor access acting strangely. The birds have signs that include listlessness, fluffed feathers, and they are not roosting in their preferred locations. The keeper notifies the facility veterinarian. Upon examination, the veterinarian finds that one of the sick birds reported by the lead keeper has died. They note the following additional clinical signs in the remaining affected birds: conjunctivitis, discharge from the nares, and one bird is open-mouthed breathing. Given the clinical signs in the birds, and the heightened concern about the HPAI detected in the area, the veterinarian recommends that the State Veterinarian be contacted to report the findings.

**Developments**

1) A keeper reports 3 ill birds. These birds routinely have access to outdoors.
2) The facility summons the veterinarian who finds that one of the sick birds has died.
3) The veterinarian contacts the Illinois State Veterinarian with their findings.

**Discussion questions:** Players, use the discussion questions below to frame a response to share. Remember, there may be no one ‘right’ answer. However, think about the training you received on ICS. If you have information you wish to share with the group, feel free to cut and paste any specific plan elements that you think would benefit the group.

**Questions for players (think about this at the level of your institution)**

1) Would establishment of an ICS structure within your institution at this time be appropriate? *I want to emphasize the use of ICS structure for general mgmt of an ‘incident’. I know we don’t have a definitive dx yet, but this structure is still useful.*

2) Who would serve as the facility Incident Commander at this time? What are primary duties of the IC at this time? *1) protect human life 2) stabilize the incident 3) protect property, i.e. the collection*
3) During the ICS training in Bloomington, we briefly discussed some of the forms that are used by an IC. Please refer to the document “Incident Briefing” (ICS 201) that can be found in the documents section. What are 2 possible objectives that you would consider including under item 7 of the Incident Briefing template at this time? *we’d be looking for things like quarantine, biosecurity, staff safety, etc*

4) What other Command Staff positions could be filled to manage the situation at this time? *Safety Officer to address biosecurity concerns within the facility and protect worker safety. PIO and Liaison Officers might also be assigned.*

5) What General Staff positions for your facility might be filled by your staff to manage this potential outbreak at this time? What would be a key responsibility of these positions?
   a. Planning: prepare the IAP for the facility
   b. Logistics: ready the facility to deal with isolation/quarantine.
   c. Operations: implement animal care objectives

6) If your zoo designated a PIO (in this morning’s module) to field questions coming in about the dead birds in the park, how might that PIO be helpful at this time? *since nothing is confirmed, the PIO may be able to assist with internal information for appropriate staff, craft appropriate messages that should be used by any staff if asked about the situation, make sure staff refers all questions from the public to the PIO, etc*

7) Briefly, what additional biosecurity protocols will you employ to protect staff and prevent spread? Players may cut and paste helpful content here for all players’ benefit. *Players may refer to specific pieces of their protocols.*

8) Does your zoo do anything differently related to access for patrons at this time?

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**MODULE 3  August 21\(^{th}\) a.m.**

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Time:  Tuesday May 14, 2014

Players, please note that the exercise timeline has jumped ahead a week. Since your lead keeper found the sick birds last Tuesday, the following has happened:
The zoo veterinarian’s concern about HPAI in the area prompted a call to the State Veterinarian’s office. The State Veterinarian dispatched a Foreign Animal Disease Diagnostician (FADD). Before the arrival of the FADD, all 3 birds have died. The FADD took appropriate samples. The FADD is highly suspicious of HPAI. Your facility was notified that the samples were positive for HPAI. The zoonotic potential of this strain is still undetermined.

Developments

1) Your veterinarian calls the State Veterinarian’s office, he sends an FADD.
2) The FADD arrived at your facility and collected samples
3) You have confirmed positive cases of HPAI in your collection specimens
4) The zoonotic potential of the strain is being determined

Discussion questions: Players, use the discussion questions below to frame a response to share. Remember, there may be no one ‘right’ answer. However, think about the training you received on ICS. If you have information you wish to share with the group, feel free to cut and paste any specific plan elements that you think would benefit the group.

Questions for Players

1) Who would serve as the facility Incident Commander at this time? ICS may change now that a confirmed case of disease is in your institution. The State Veterinarian, may be an overall commander, but there will still be an IC within the facility to manage facility concerns, with zoo staff functioning under his directives.

2) What actions, strategies or tactics may the Safety Officer focus on at this time? (See item 8 of the Incident Briefing ICS 201 form. It will help you see how listing these items helps to make this 201 form a useful tool for Briefings.) Discuss/list action items that will protect human health as this potentially zoonotic disease is managed.

3) If the Incident Commander staffed General staff positions, (see item 9 in Form 201 for a reminder) what would some responsibilities be for the following? Planning Section Chief? Logistics Section Chief? Operations Section Chief? Players can refer to the ICS position description document available on the website.

4) How can the Zoo PIO ensure your messages are accurate and do not conflict with other information regarding the event? List some important messaging objectives for staff and public that will likely be addressed by the JIC. The zoo PIO may become part of the JIC.
5) What additional biosecurity protocols will the Safety Officer recommend to protect staff, volunteers and patrons and prevent spread? *This will differ across institutions*

6) Does your facility do anything differently related to zoo access for patrons at this time? What stakeholders will you communicate with to determine if closing parts of your facility is appropriate? What General Staff position may be responsible for assisting with the closure of any part of your facility, if appropriate? *State vet will have authority, with VS and potentially AC input. We are deliberately not mentioning the zoonotic nature of this virus. We realize that a zoonotic disease would involve much larger CDC oversight, and for this pilot exercise we don’t want to consider the human health objectives in great detail. Only that we are responsible for protecting employees and visitors. Operations Section would have the responsibility for securing sections of a zoo.*

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**MODULE 4  August 21**

**Time:** Monday 7 a.m. 5/20/2014

Over the weekend, news reports indicate wild bird mortalities and poultry deaths in commercial and background flocks in Illinois are attributed to HPAI. *(See attached maps for affected locations relative to your institution).* The State Veterinarian contacted Illinois Emergency Management Agency, who alerts the State Emergency Response Center (SERC) Duty Officer in Springfield. The Illinois Department of Natural Resources in conjunction with the Illinois Department of Agriculture has established a website to provide the public with information about HPAI and a hot line to report dead birds. So far, the virus has only been detected within the State of Illinois.

Your Director arrives at work on Monday morning, with 3 voicemail messages requesting an interview about the 3 dead birds at your facility. Even though your Zoo PIO stressed that all statements must be coordinated through the JIC, apparently, an employee has leaked sensitive information on their personal Facebook page.

**Developments**

1) There are bird deaths in poultry and wild birds in your area
2) A website has been established to provide information about HPAI and a hot line has been set up for public to report dead birds or poultry.
3) IEMA has been notified of the outbreak.
4) Your Director has requests for interviews from the press
5) There may be erroneous or sensitive information about your facility on Facebook
Discussion questions: Players, use the discussion questions below to frame a response to share. Remember, there may be no one ‘right’ answer. However, think about the training you received on ICS. If you have information you wish to share with the group, feel free to cut and paste any specific plan elements that you think would benefit the group.

Questions for AZA Players

1) How might the role of your facility’s Incident Commander change with this wider outbreak?  
   *We want zoos to realize that their facility IC may become part of a wider unified command.*

2) Briefly describe some of the agencies you would expect to be part of a Unified Command for a State-wide HPAI outbreak:

3) How will your facility’s Command Staff interact with the State ERC?

4) Does your institution assign someone to monitor social networking sites? What does your facility do about the Facebook posting?

5) Using the Incident Briefing ICS 201 form in the Documents section of FoodSHIELD as a guide, what are some of the Actions, Strategies and Tactics that are appropriate at this time?

MODULE 5  August 22\textsuperscript{th} a.m.

Time: Friday 5/24/2014

*It has been less than 3 weeks since the die offs in the local park.* With the virus found in wild birds, the poultry industry, your institution and backyard flocks, the USDA believes that it may be 60 days or more before the outbreak is fully contained. Fortunately, your facility has had no further cases of disease in your collection specimens. The ramped-up protocols for disinfection in your facility have led to exhaustion of your supply of approved disinfectants and personal protective equipment (PPE), namely N-95 masks. Your usual suppliers cannot fill your orders due to excess demand.
Developments

1) The outbreak has spread to affect wild birds, poultry, other institutions and backyard flocks.
2) Experts believe it may take an additional 60 days to contain the outbreak.
3) No further cases of disease have been detected in your collection.
4) Supplies of disinfectant and PPE are at critical levels.

Discussion questions: Players, use the discussion questions below to frame a response to share. Remember, there may be no one ‘right’ answer. However, think about the training you received on ICS. If you have information you wish to share with the group, feel free to cut and paste any specific plan elements that you think would benefit the group.

Questions for AZA players

1) Which ICS position is responsible for trying to locate adequate supplies?

2) If your institution has exhausted your resources on hand, (i.e. Personal Protective Equipment, disinfectant, etc) and your normal distributors cannot fill the orders, how might you go about acquiring the needed supplies? Which stakeholders may be able to assist with supply procurement? *We are assuming that the State Vets office may have limited resources. I don’t really want to get into NVS or discussion about ESF 11 for this exercise; we have not discussed these topics in our training exercises enough to expect these answers. Local APHIS offices may also have access to through them.*

3) What General Staff position may be in charge of finding these supplies?

MODULE 6 August 22th p.m. Hot wash

Wrap Up questions will include some of the following topics. There will also be a Survey Monkey survey as part of the evaluation.

1) Did this exercise reinforce the principles that were presented in the Flu II ICS 100 and 200 training?
2) Did you have any problems with the website during the exercise?
3) Did the training on the use of the FoodSHIELD site adequately prepare you to use the site?
4) What new elements did you learn from this exercise?
5) Discuss/List the top three strengths of this exercise
6) Discuss/list top three areas of improvement that would have made this exercise better.
7) Did this exercise identify any weaknesses or strengths in your Individual Zoo response plans? Please elaborate.
8) Record any additional comments and other lessons learned from this exercise
9) Do you have any suggestions for future exercises?