A Wing and a Prayer

Exercise program summary and initial observations

Rosemary Speers, Ph.D.
Joel Silverman, Ph.D.

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Outline

- Introduction
- Exercise Recap
  - Initial scenarios
  - Timelines
  - Common decisions
- Common Themes
  - Laboratory operations
  - Laboratory-field coordination
- Preliminary Recommendations

Overview of the exercise program

- Objectives are to test, train, and enhance resources and readiness to deal with an HPAI H5N1 outbreak
- Also intended to address specific action items in the Implementation Plan of the *National Strategy for Pandemic Influenza*
- Hybrid exercise/game allows participants to choose from a set of limited resources to deploy as events change during an HPAI outbreak.
  - The *board game* is a model of AI outbreak response, with a disease spread model embedded in it
  - The *table-top exercise* is the experience of using the board game interactively, for the purposes of generating discussion and learning about AI response

Overview of the exercise program

- This version focused on lab-field interaction
  - Conducted 38 exercises between April and October
  - Typical attendees:
    - Laboratory Director
    - Laboratory section heads
    - State Veterinarian
    - State public health veterinarian
    - USDA AVIC and/or AEC
    - Poultry industry personnel
  - Other agencies:
    - State and/or USDA wildlife services
    - State emergency management
    - State department of health
    - Universities

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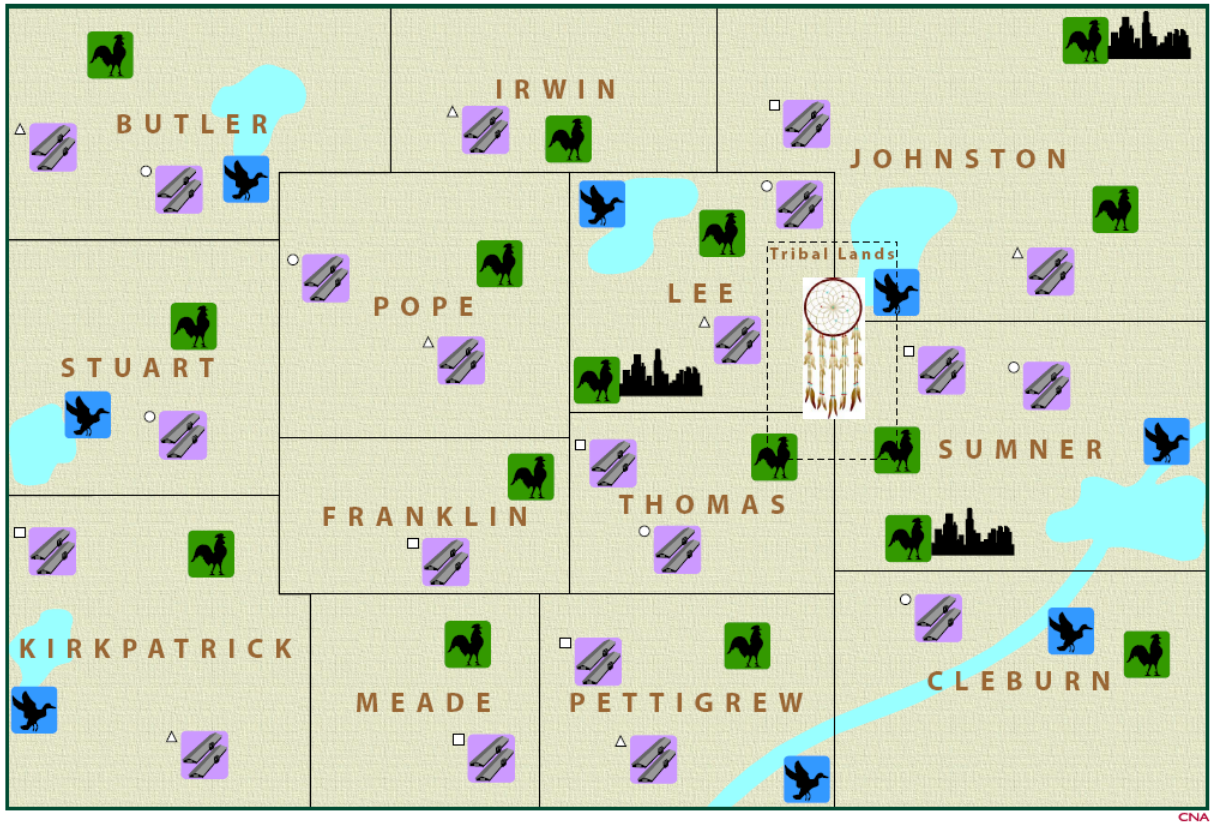
Exercise components

- Map is a simplified depiction of a 13-jurisdiction area of an unspecified region



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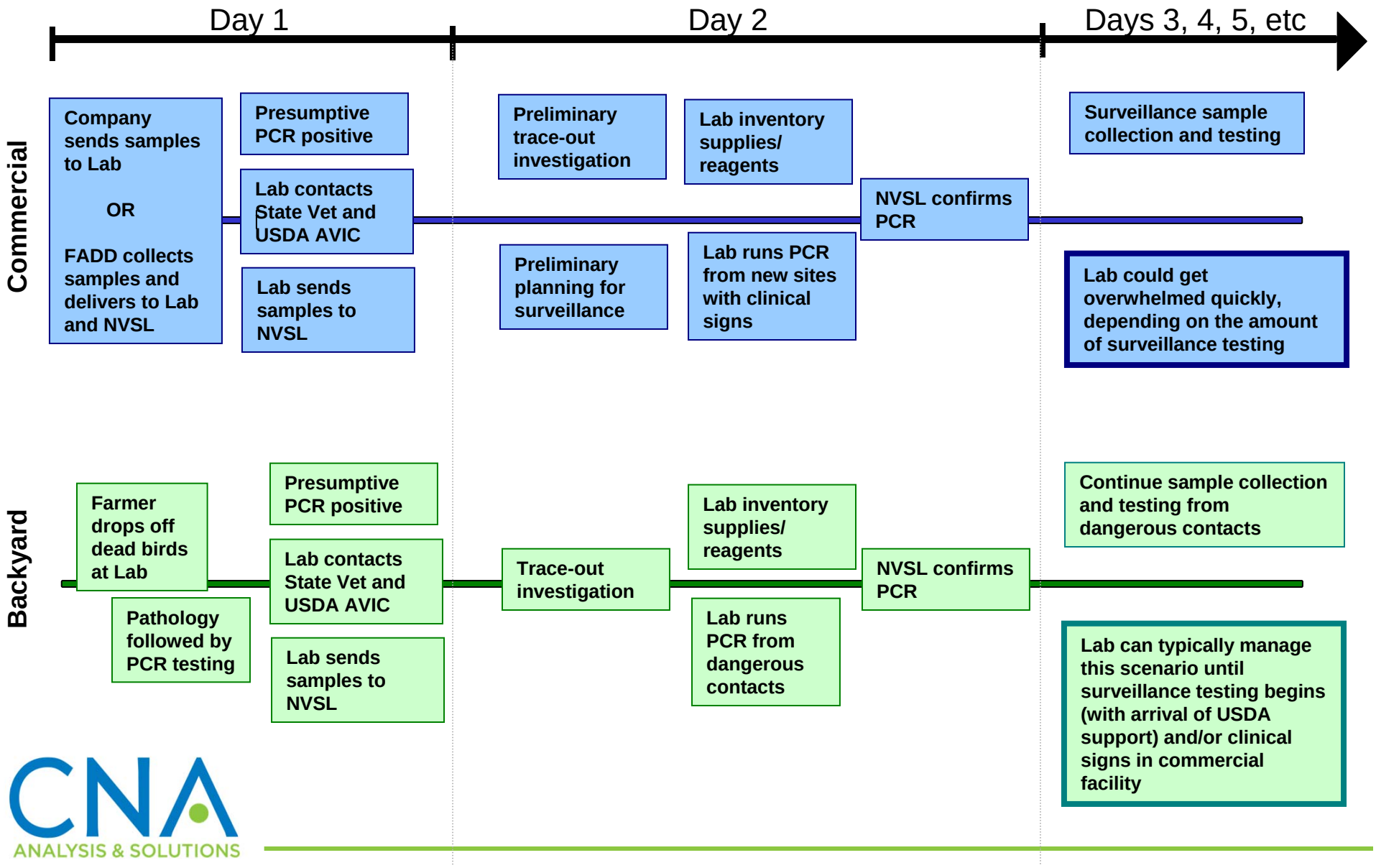
Initial scenarios

- Company veterinarian at commercial facility observes increased mortality (perhaps only a few % above normal) and birds with respiratory distress.
  1) Company veterinarian contacts State Animal Health Official. FADD collects samples and sends them to the lab and NVSL for testing.
  2) Company veterinarian submits additional samples to lab for testing.
- Farmer arrives at laboratory with several dead chickens (10-20% of his flock). Farmer informs laboratory that 50% of his remaining chickens are sick with flu-like symptoms.
- Laboratory reports presumptive positive test (AGID or PCR) from routine NPIP surveillance testing for commercial facility or live bird market.

Timelines



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Common decisions

- Routine samples
  - About 30-40% of the labs would stop accepting routine samples and defer them to other laboratories
  - About 60-70% of the labs would continue to run routine samples, either at their facility or a branch laboratory
  - In several instances, participants commented that state-wide movement restrictions could limit the number of routine samples.
- Augmenting laboratory capacity
  - In most instances, labs would rather build capacity at their lab rather than sending out AI samples
  - However, several labs are constrained by a lack of space
  - In some scenarios, the number of samples collected would overwhelm capacity within 2-3 days, which is likely faster than new personnel or equipment could arrive
    - This did lead to the question of whether other states, unaffected by the disease, would accept AI samples

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Common Themes
Laboratory operations

- Certification
  - Typically most labs have access to personnel who know how to run PCR, but aren't certified.
  - Also, some labs have equipment that was recently de-certified.
- Requirements for BSL-3 laboratory space
  - Confusion whether HPAI samples could continue to be processed in BSL-2 spaces
- University constraints
  - Bio-security
  - Overtime
  - Re-ordering supplies and reagents

Common Themes
Lab-field coordination

- Coordination with unified command
  - Labs were often unaware that unified command could support their operations
    - For example, the logistics and finance sections can be given the responsibility of obtaining and paying for lab resources (e.g. PCR kits, equipment, personnel)
    - Led to discussions of how best to coordinate with NAHLN to request these resources
  - Information cannot be transferred electronically from the Lab database (LIMS) to the USDA database (EMRS).
    - Therefore information has to be hand-entered several times which can lead to transcription errors
      - Use of bar-codes would help to alleviate this problem
      - Resistance from field responders
    - Also, no one ID number common to both databases to help to correlate the data
      - Typically have to use name and address

Common Themes
Lab-field coordination

- Coordination with field responders
  - Labs were often not involved in decisions about sample prioritization and sample transport
    - Knowing this information can help the lab better prepare for sample arrival and be more efficient
  - Labs were often not involved in decisions about sample collection procedures
    - In some instances, field personnel collected carcasses or tracheas, rather than swabs
    - The exercise provided an opportunity for lab and field personnel to discuss issues such as these and come up with solutions to maximize field and lab efficiency

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Preliminary recommendations

- NAHLN should work with states/regions to develop tailored emergency checklists and decision trees
  - Designated overflow laboratories for routine samples and outbreak samples
  - On-call personnel for administrative and technical duties
    - NAHLN can also consider developing an emergency accreditation protocol
  - Emergency supplies of reagents
- Labs should coordinate with appropriate regulatory officials to develop protocols for coordinating with unified command during an emergency
  - Labs should identify the types of resources they will need in an emergency and suggestions for how to source them
  - Regulatory officials should investigate funding sources for these resources
  - Develop protocols for coordinating with NAHLN

Preliminary recommendations

- Labs should coordinate with appropriate regulatory personnel to verify that expected sample collection, sample prioritization, and sample transport protocols are designed to maximize operational efficiency
  - Labs should consider designating a liaison who is responsible for coordinating with unified command during an emergency
- NAHLN should clarify whether HPAI samples can be run in BSL-2 spaces
  - If not, NAHLN needs to work with labs without BSL-3 capability to develop a plan
  - One suggestion would be to investigate the use of trailers
- Labs and field personnel should develop appropriate protocols for how to share information
  - Bar-coding
  - Modify the LIMS database to include an emergency section which included the USDA premID and/or GPS coordinates

Questions/Comments?

Rosemary Speers, Ph.D.
(703) 824-2918
speersr@cna.org

Joel Silverman
(703) 568-2952
silvermj@cna.org

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