

From Flock to Flu Pandemic: Key Takeaways from NYC Health + Hospitals' HPAI Preparedness



Introduction

- NYC Health + Hospitals (NYC H+H) is the largest US municipal healthcare system
- During this summer, as a part of their Special Pathogens (SP) team, we focused on the system's preparedness for Highly Pathogenic Avian Influenza (HPAI)

Background

- The responsibility of the NYC H+H SP team is to prepare for and respond to major infectious diseases, including HPAI
- Because cases of HPAI in poultry have been rising in the US, there is concern for a potential human outbreak, necessitating proactive planning

Methods

- The SP team hosted a tabletop exercise involving stakeholders across the departments of NYC H+H and the NYC Dept. of Health
- The exercise was to answer 3 objectives, addressing them through 3 escalating scenarios



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Results

The Three Modules

- Module 1. Suspected case of HPAI presenting in a 56-year-old male patient entering an ED.
- Module 2. Patient from Module 1 returns to the ED with worsened symptoms, tests positive for HPAI, and is admitted to the ICU. Additional situation of the patient's wife and child presenting similar symptoms to the pediatric ED also was discussed.
- Module 3. Number of confirmed cases increases in the city as contacts of the original patient have developed ILI and have begun to seek care at NYC H+H facilities.

The Three Objectives

- Objective 1. Identify key triggers to support proactive systemwide escalation of HPAI outbreak response
- Objective 2. Review processes to minimize transmission within healthcare facilities and prevent exposure to staff and patients
- Objective 3. Discuss strategies to establish, maintain, and track communication with staff and situational awareness

Key Takeaways from the Tabletop Exercise

Objective 1	Objective 2	Objective 3
<ul style="list-style-type: none"> • Define the point at which screening procedures about exposure to poultry are activated and utilized by healthcare providers when assessing patients in triage • Ensure that the CDC definition of "exposure to poultry" is properly disseminated to healthcare staff and patients • If there is community spread of HPAI, escalate contact tracing efforts, activate systems to protect staff, and provide communication to the entire healthcare system about the potential for further cases 	<ul style="list-style-type: none"> • Adapt relevant COVID-19 strategies to protect staff for HPAI, such as educating the staff on risks when handling HPAI patients, stockpiling PPE, and implementing internal contact tracing • If a patient screens positive for HPAI, establish a notification mechanism to inform healthcare workers to isolate the patient and don proper PPE for staff safety • As the outbreak escalates, transition to a "no wait" waiting room model by utilizing telehealth methods, as done during the COVID-19 pandemic 	<ul style="list-style-type: none"> • Establish clear rhetoric on how to describe HPAI infections and potential outbreaks within system-wide and public communications • Ensure call-trees, and each facility's staff's knowledge of these, are up-to-date for HPAI • Utilize already established communication channels between different levels of command • Clearly define how many cases would trigger facility-wide or system-wide alert • Clearly define at what point would the public be informed of the threat of an outbreak

Discussion

- After analyzing the recording of the tabletop exercise, we first drafted an After-Action Report (AAR) highlighting areas of strength and improvement
- We then designed an Incidence Response Guide (IRG) to HPAI, which will be disseminated across the H+H system and to its facilities

Conclusion

- Now, with the AAR and IRG that we've prepared, the SP team can continue with their 5-step preparedness plan against HPAI, including future site visits, secret shopper drills, and PPE training
- Ultimately, this can culminate in a Full Scale Exercise, similar to the Marburg Virus exercise that we participated in August (Information can be [here](#))

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