Psittacosis in Virginia and Georgia, 2018

- Charlie Broaddus, DVM – Virginia State Veterinarian
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Broiler Breeder Spent Hen Processing Plants

• Only six (6) Broiler Breeder Spent Hen processing plants in the country

• 2- GA; 1- VA; 1- MS; 1- AR; 1- CA

• Chlamydia psittaci outbreak involved workers in one (1) plant in Virginia and one (1) plant in Georgia
Virginia Sequence of Events

• Tuesday, September 4 – first notified of respiratory cases in poultry plant workers – NOT AI!
• Friday, Sept. 7 – human samples tested positive for Chlamydia species
• Saturday, Sept. 8 – plant voluntarily suspended processing and FSIS suspended inspections
Virginia Sequence of Events

• Sept 8-17 – plant performed C&D, environmental testing by Virginia Department of Health, uncertainty about criteria needed to reopen

• Tuesday, Sept. 18 – plant resumed operations
Virginia Summary

• Since then – no new cases, company has attempted to find source of infection
• Virginia Department of Health and CDC led the investigation, just kept us aware
• Some thought of looking at possibility of testing broiler breeders pre-movement for *Chlamydia psittaci*
• Potential source flocks identified, but none in Virginia
Georgia

Psittacosis found in workers in a spent hen processing plant

No evidence of sick birds
Multistate Psittacosis Outbreak

**Virginia**
- Multiple workers sick at Plant
- Visit hospital
- Chlamydia psittaci found in workers
- C. psittaci **is NOT** reportable
- Public Health/CDC/FSIS involved
- Plant voluntarily closes temporarily
- Spent foul diverted to Georgia
- C. psittaci **found** in environment
- Plant reopens

**Georgia**
- Multiple workers sick at Plant
- Visit hospital
- Chlamydia psittaci found in workers
- C. psittaci **IS** reportable
- Public Health/CDC/FSIS involved
- Plant voluntarily closes temporarily
- C. psittaci **NOT found** in environment
- Plant reopens
Georgia Psittacosis Outbreak

- In mid-September 2018, the Georgia Department of Public Health (GDPH) was notified about three employees of a single poultry plant who were hospitalized with pneumonia. GDPH launched an investigation to determine the etiology, source, and scope of the outbreak.
- Georgia State Veterinarian was notified and worked to facilitate communication and information between the plant, GDPH, CDC, GA poultry industry, FSIS and Virginia State Veterinarian.
- No evidence of clinical psittacosis in poultry – no source identified – only human illness.
- Clinical specimens from the three hospitalized employees were tested at CDC; *Chlamydia psittaci* infection was confirmed in two.
Georgia Psittacosis Outbreak

- Friday, September 14th - Plant voluntarily ceased operations
- Saturday, September 15th, to assess for an environmental source of *C. psittaci*, GDPH collected environmental samples in triplicate at 46 sites around the plant (138 samples total)
- GDPH epidemiologists provided education at mandatory employee meetings and initiated active case finding.
- Cases were defined as a poultry plant worker with a) lab-confirmed *C. psittaci* infection OR b) physician-diagnosed pneumonia OR c) fever and/or chills plus at least two of the following symptoms: cough, headache, myalgia.
- Epidemiologic studies to elucidate risk factors for illness are ongoing.
Georgia Psittacosis Outbreak

- All 138 environmental samples tested negative for *C. psittaci*.
- As of October 11, 2018, 22 confirmed cases have been identified.
- Fourteen (64%) had physician-diagnosed pneumonia, and six (27%) were lab-confirmed.
- All lab-confirmed cases had pneumonia and fever, with a median temperature of 103.6°F. Of the confirmed cases, 11 (50%) were admitted to a hospital.
Georgia Psittacosis Outbreak

Conclusion

- *C. psittaci* infections can be clinically severe in humans
- At this time, the specific source of infection is unknown
- Management at poultry processing facilities should be aware of this occupational risk and take measures to educate and protect employees, such as encouraging proper use of personal protective equipment and self-monitoring for symptoms.
Georgia Psittacosis Outbreak

Considerations

• C. psittaci is a Reportable Animal Disease in Georgia

• It is reportable as a laboratory finding and as clinical disease

• Georgia Poultry Industry is concerned and wants to conduct environmental surveillance

• Plans are under consideration to remove environmental sampling as reportable
Questions