



# Emergency Mass Depopulation Strategies

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# A Quick Comparison - MN

- 2015

- 109 Commercial Premises
  - 104 Turkeys
  - 5 Layers
  - 1 Backyard Flock
- 8,894,004 Birds
- 7 days average time to depop during peak of outbreak
- Many farms experience depop due to the disease

- 2022

- 82 Commercial Premises
  - 80 Turkey
  - 1 Broiler
  - 1 Layer
- 21 + Backyard Flocks
- 3,138,593 Birds
- Almost all flocks depopped within 48 hours
- Only a couple of barns died from the disease

# Timely Depopulation

- Acting on lesson learned from 2015
- Initial testing based off small increases in mortality
  - Caused more false alarms
- Depopulating off NAHLN results, not waiting for NVSL confirmation
- A NAHLN diagnostic lab in the heart of turkey production
- All combined allowing us to hit the ground running

# Preparedness

Low Number of Cases = Lower workload



Cases



Workload

Being prepared for situations of when you are in the peak of cases is different than when you have less cases

# Think you're prepared?

- For one case? Two cases? Ten cases in three days?
- Need depth to our response bench
  - Case managers
  - Depop crews
  - Foam and Foamers
  - Lab personnel
  - Etc
- Have a farm specific plan in place
  - Depopulation method
  - Disposal method

# Leverage resources

- Industry equipment and crews depopulated a high percentage of the MN positive cases
- Local industry understands
  - The barns
  - The birds
  - The growers
  - The area
    - Local resources
  - Local weather

# Options

- Foam
  - Has its limitations
- VSD +
  - Can overcome these limitations that foaming has but poses its own
    - Need for sharing of best practices with real metrics
    - Don't use only anecdotal evidence
- CO<sub>2</sub>
  - Human safety when working with CO<sub>2</sub>
  - Barns need to be sealed

# Water Based Foam - PROS

- Standardized protocols are available
- Works well when there is collaboration between state/federal and industry representatives
- AVMA's primary depopulation method





# Water Based Foam - Opportunities

- Crews needs to be trained on the variety of barn construction styles throughout the industry
  - Barn width
  - Turkeys versus chickens
  - Style of foamer
- Temperature and water quality impact foam generation
- Better communication on foam saving strategies
  - Pushing birds up or not
- Water/foam quantities needed for big birds/large sites
- Layer farms can not use the foaming method
  - Cages, aviary and slatted raised floor type systems
- Sick birds clinically ill with HPAI do not move well to be foamed

# VSD (+) - PROS

- Only legitimate option for timely depopulation of a layer complex
- Most efficient option for mature birds
- Minimizes people and equipment on and off a positive premise
- Can help overcome sick bird challenges

# VSD(+) - Opportunities

- Need a forum to honestly share best practices and key metrics of success. This information should be used to generate an effective SOP in collaboration with industry, state, USDA
  - Could be used to gain support from AVMA for use in constrained circumstances

# VSD (+) Lesson Learned

- Bird age and density
- Weather
  - Wind
  - Temperature
- Amount of supplemental heat needed
- Moisture
- Barn structure
  - Ability to seal the barn
  - Inlets, curtains, doors, fans



# Post-depopulation Euthanasia

- After depopulation, there are often birds that need to be euthanized, regardless of the method
- All methods of AVMA euthanasia should be allowed

# Emotional Toll

- Be alert for growers being overconfident that “they have this”
- Provide useful support
  - Have plans for supporting growers with SMEs who are knowledgeable and bring solutions
  - Avoid establishing barriers without offering solutions
- Simplified guidance on the whole process, from finding a farm is HPAI positive until the farm can be repopulated

# Closing Thoughts

- We need OPTIONS for emergency depopulation
  - Our industry is incredibly diverse
  - Our geography is large
  - Our weather is variable
- There just aren't enough people/equipment for a sustained outbreak over multiple state
- Keeping VSD+ in our toolbox is a necessity, however we need a more defined SOP with state, federal and industry perspectives at the table