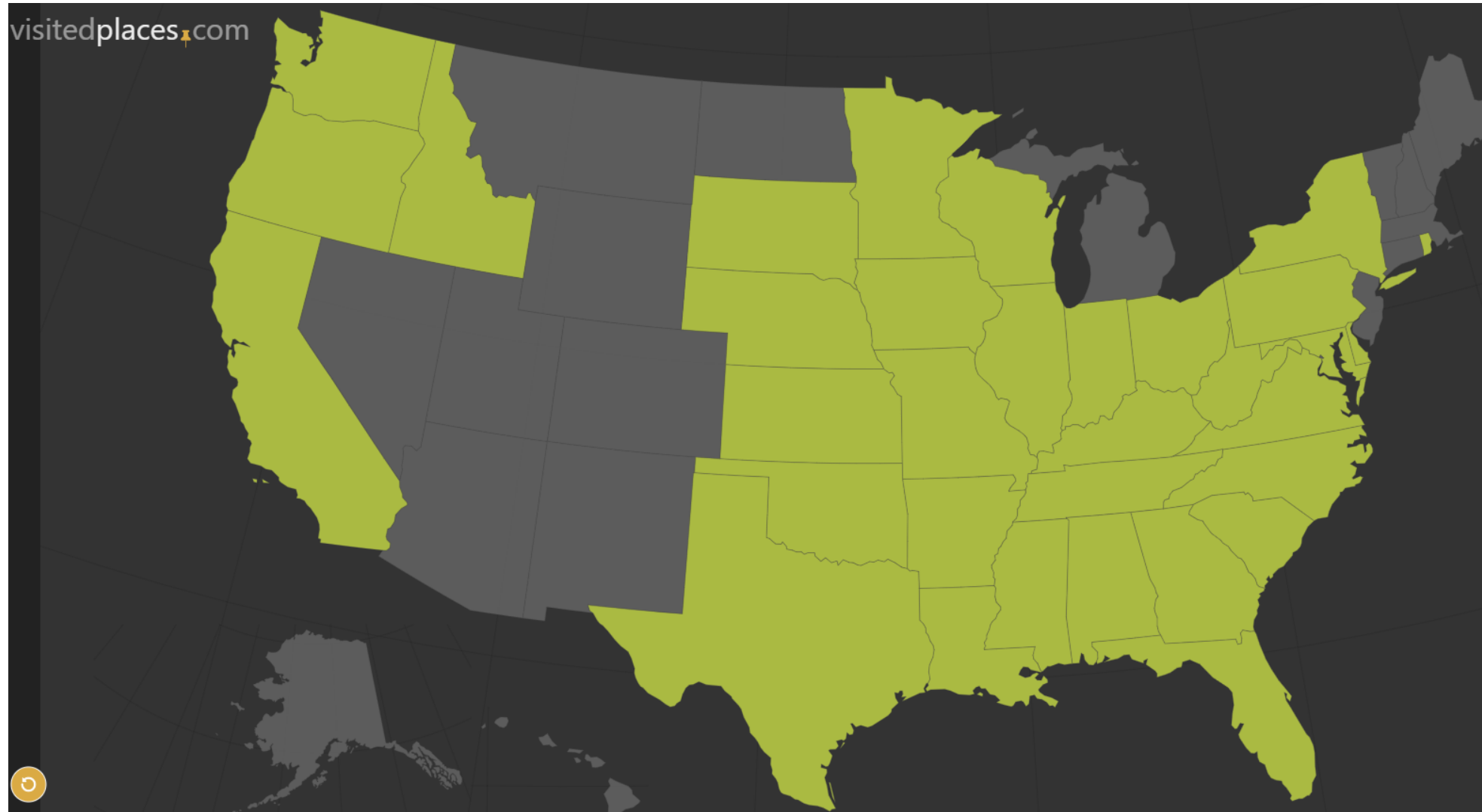


# Mycoplasma, Egg Movements, and NPIP Status: Lessons from the field

Dr. Elizabeth Dale, DVM, MAM, dipl. ACPV  
NPIP Biennial Conference 2024

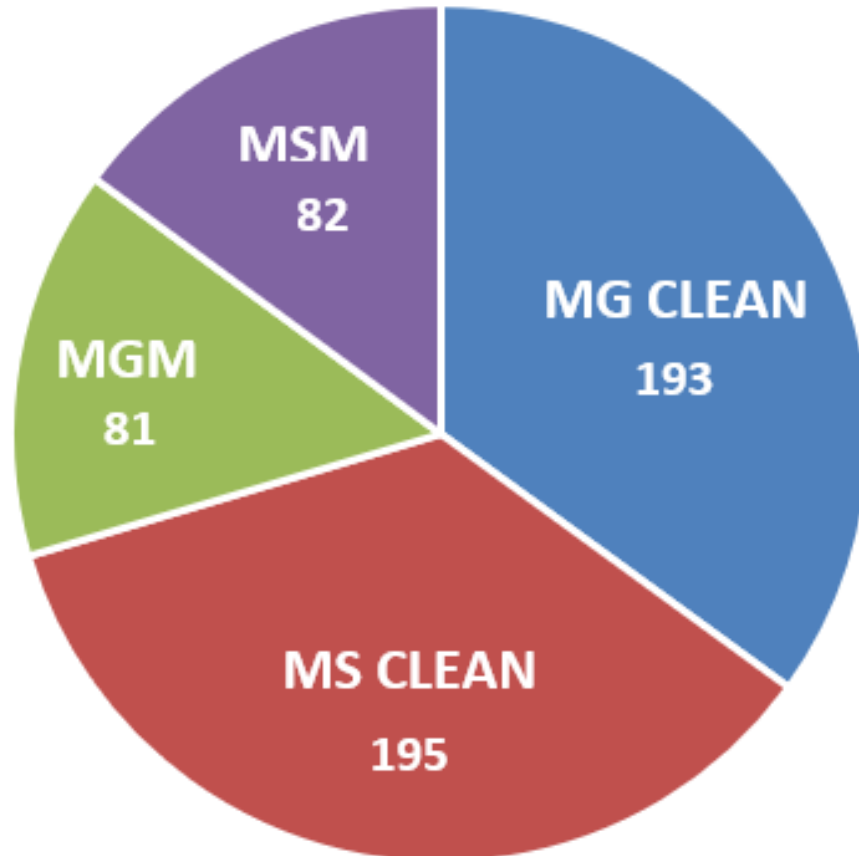


# NPIP Mycoplasma Programs: Commercial Flock Participants in 33 States

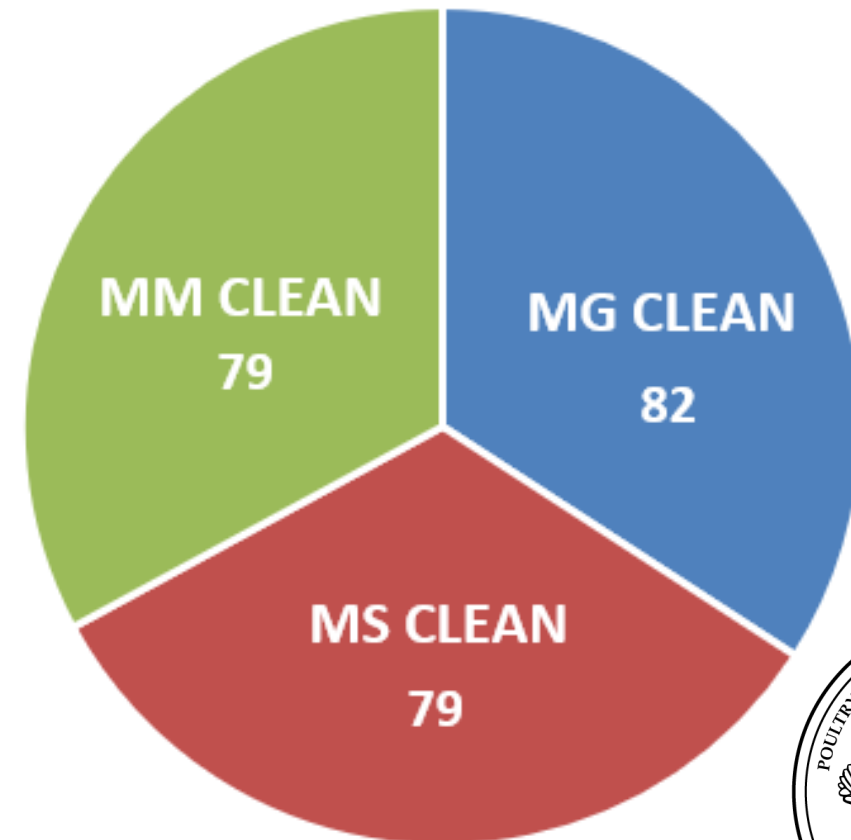


# Participant Flocks: Current Status

Egg and Meat Type Multiplier Breeding Flocks

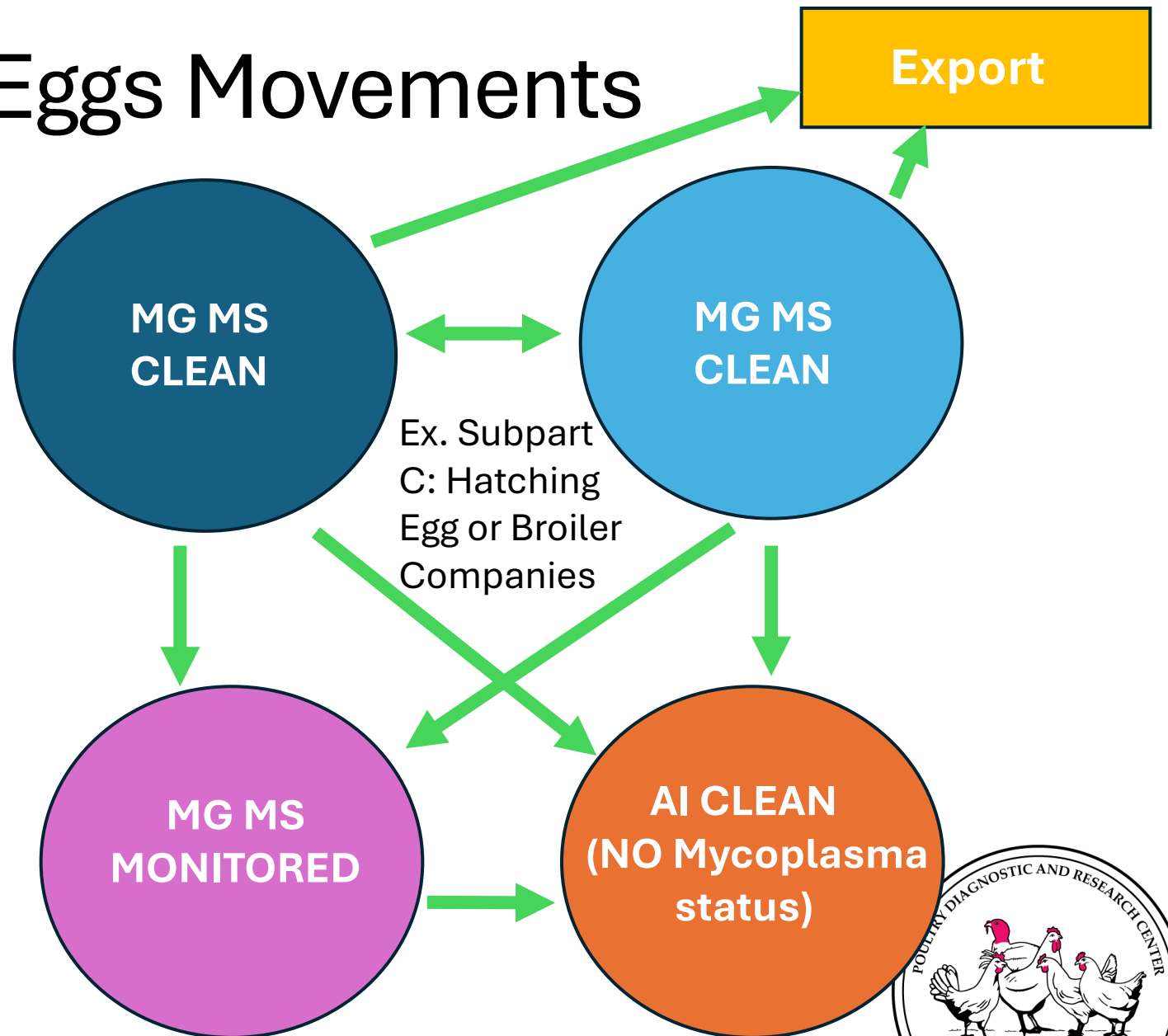


Turkey Breeding Flocks



# Chicks or Hatching Eggs Movements

- Movements may only occur between equal status or from higher to lower program status
- Export requirements country dependent (often MSMG Clean)



# Field Scenario: Movement from Vaccinated Flocks

- Flock vaccinated with ts-11 MG vaccine
- Testing entire complex at CLEAN level
- Movement allowed at discretion of state OSA
  - +/- additional requirements
- 1<sup>st</sup> state: **NO** eggs or chicks allowed in from these flocks
- 2<sup>nd</sup> state: Yes, but will lose hatchery's status
- 3<sup>rd</sup> state: Yes, but will lose status and will require placement in zone and monitoring of broiler progeny
- 4<sup>th</sup> state: **Yes, with ts-11 specific PCR results provided**




# Field Scenario 2: Importing Hatching Eggs

- 3 different companies (countries) being explored
- Satisfy USDA APHIS import requirements
  - Health certificate
  - Import permit
- Asked for additional testing and documentation
  - Pullorum/Gallinarum testing
  - AI testing
  - Mycoplasma testing
  - Vaccination status

[Permit Applications\(1\)](#) [No Permit Required but Conditions Apply](#) [Inadmissible](#)

### 1. VS 17-129 Import Permit Application

Subtotals (1 Materials ) Estimated processing fee: \$150.00

 **Chicken Hatching Eggs**  
Birds, Ratites, and Poultry | PR-045097  
Import from Belgium for Hatching Purposes

Attributes

*No attributes to be displayed.*

✓ Permit Required  
*You need a permit for this request.*

✓ [Documentation Required](#) ^

A health certificate is required at first US port of entry unless otherwise stated on the import permit.

An APHIS veterinary inspection is required at the first US port of entry unless otherwise stated in the import permit (if a permit is required). You must contact the VS port veterinarian at the U.S. port of entry at least 72 hours prior to arrival to schedule an inspection on arrival. Contact information can be found here:  
<https://www.aphis.usda.gov/contact/trade>



# Importing Hatching Eggs

- Start EARLY!
- Communicate directly with exporting vet and/or company vet when possible
  - Ask for documentation
- Communicate closely with NPIP National Svc. and OSA
  - Maintenance of current status at their discretion
- Involve SME such as Dr. Ferguson-Noel for appropriate guidance
  - Assay equivalency
  - Country mycoplasma status
  - ISO/lab accreditation

**Resultaten: Organen**

Monsternr.	Identificatie	Categorie	Resultaat
(001)	3	FOK-VLEES	Niet aantoonbaar (S)
(002)			Niet aantoonbaar (S)
(003)			Niet aantoonbaar (S)
(004)			Niet aantoonbaar (S)
(005)			Niet aantoonbaar (S)

**Legende:**

Resultaat	Omschrijving
Niet aantoonbaar (S)	Geen Salmonella

**Samenvatting**

**Serologie**

Staalnr	Analyse	# Stalen	Positief	Negatief	Avg. Titer	St. Dev.	Var.Coef.
1 - 15	ELISA Aviaire Influenza virus (AI) 3	15	0	15	0,00	0,00	0
16 - 30	ELISA Aviaire Influenza virus (AI) 3	15	0	15	0,00	0,00	0
31 - 45	ELISA Aviaire Influenza virus (AI) 3	15	0	15	0,00	0,00	0
46 - 60	ELISA Aviaire Influenza virus (AI) 3	15	0	15	0,00	0,00	0

**Resultaten: Swab**

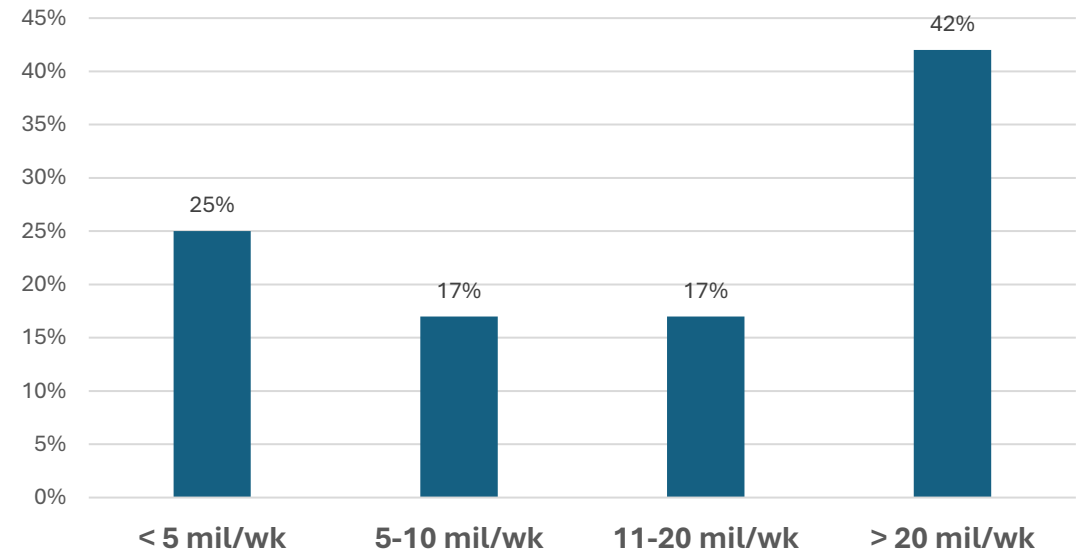
Monsternr.	Identificatie	Categorie	Resultaat
(001)	1.2	FOK-VLEES	Niet gedetecteerd
(002)			Niet gedetecteerd
(003)			Niet gedetecteerd
(004)			Niet gedetecteerd
(005)			Niet gedetecteerd
(006)			Niet gedetecteerd
(007)			Niet gedetecteerd
(008)			Niet gedetecteerd
(009)			Niet gedetecteerd
(010)			Niet gedetecteerd
(011)			Niet gedetecteerd
(012)			Niet gedetecteerd
(013)			Niet gedetecteerd
(014)			Niet gedetecteerd
(015)			Niet gedetecteerd
(016)			Niet gedetecteerd
(017)			Niet gedetecteerd
(018)			Niet gedetecteerd
(019)			Niet gedetecteerd
(020)			Niet gedetecteerd



# Broiler Industry Survey on Chick and Hatching Egg Movements

- August 2024 sent to AVBP
- 100% of respondents' companies were NPIP participants for both MG and MS
  - 85% participated in MG and MS Monitored programs
  - 46% participated in only MGMS Clean programs
- 100% of respondents said their companies routinely move eggs or chicks between states
- 62% of respondents said their company only operates domestically

Broilers produced weekly by respondent companies



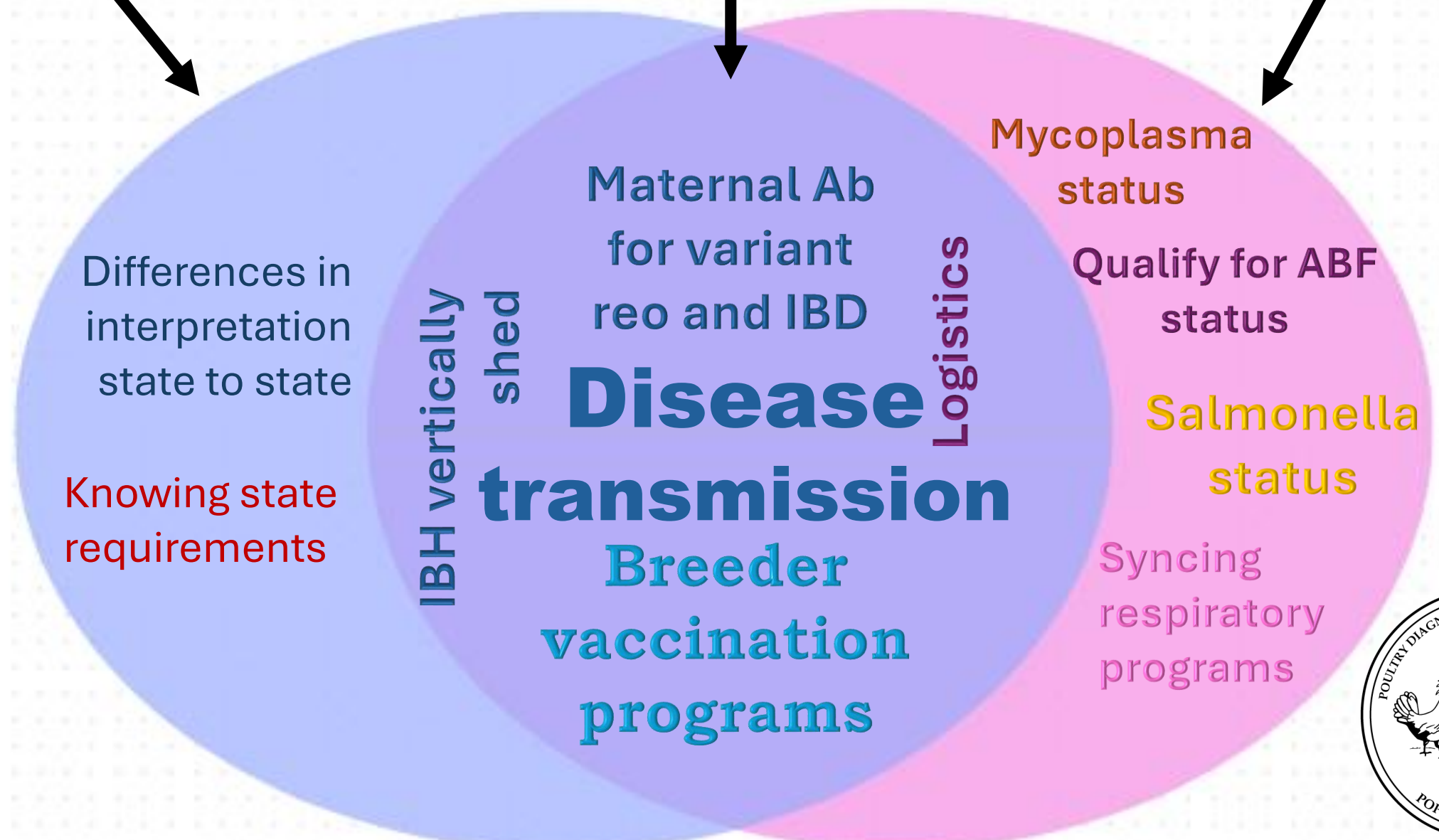


# Broiler Industry Survey: Majority have bought or sold outside eggs

- 46% have sold day of hatch chicks (all domestic)
- 77% have bought day of hatch chicks (all domestic)
- 100% have sold hatching eggs
  - 100% domestically; 31% internationally
- 100% have bought hatching eggs from outside company
  - 100% domestically; 31% internationally



# Moving Between States and Purchasing Outside Eggs: Common concerns



# Mycoplasma vaccination relatively uncommon in US

- 38% of respondents had used ts-11
  - 1 respondent had used 6/85
  - 0 respondents had used F-strain
- 
- In general, NPIP Programs and Biosecurity have done a good job keeping Mycoplasma prevalence in the US very low, reducing need for vaccination.



# Discussion Topics



- Industry will continue to become more global
- TRANSPARENCY is the best policy
- RISK is unknown and variable
  - Mycoplasma prevalence and strain pathogenicity varies greatly country to country
    - Ask for vaccination programs
    - Ask for testing!
- Program or guidance needed to assess disease risk and equivalency of monitoring assays
  - NPIP Checklist
  - USDA APHIS VS
  - Other?

