

US Swine Health Improvement Plan (US SHIP)



House of Delegates Meeting (US SHIP HOD)

September 3 – 5, 2024

DoubleTree by Hilton

Bloomington, MN

Conference Proceedings

Participant Name: _____

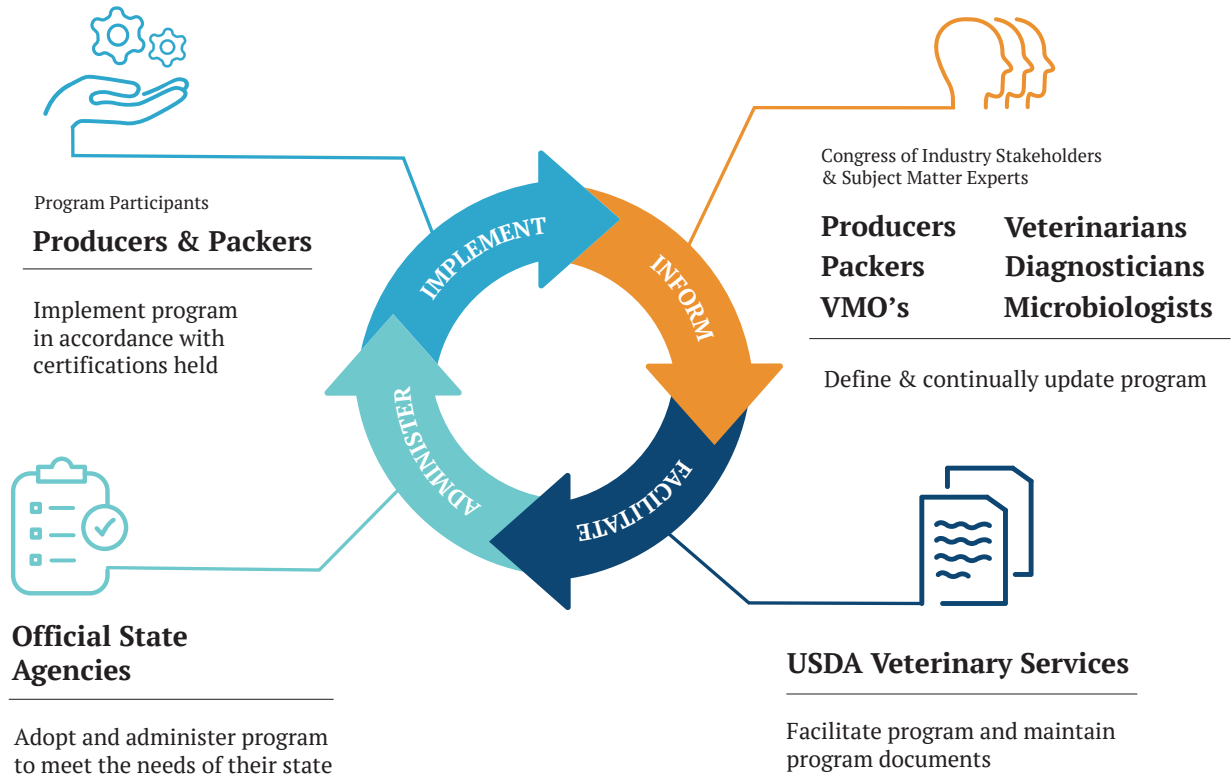


US Swine Health Improvement Plan



ASF-CSF Monitored Certification

“A proven platform for safeguarding, certifying, and bettering animal health”



Industry, State, & Federal Partnership

Pathway for improving preparedness across US Pork Industry

US SHIP will establish a **National Playbook** of technical standards centering on **Prevention and Demonstration of Freedom of Disease** Outside of Control Areas in Support of Animal Health, Commerce, and Trade.

Biosecurity, Traceability, and Disease Surveillance

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Overview of US SHIP

US SHIP is being modeled after the National Poultry Improvement Plan (NPIP), a collaborative effort involving industry, state, and federal partners providing standards for certifying the health status of greater than 99% of commercial scale poultry and egg operations across the US. US SHIP aims to establish a similar platform for safeguarding, improving, and representing the health status of swine across participating farm sites, supply chains, states, and regions.

Considerable progress has been made over the course of the first four years of the initial pilot phase of US SHIP resulting in a pathway forward towards establishing US SHIP as an officially recognized (USDA codified) program for certifying the health of US swine. The USDA also received appropriations for US SHIP in the FY2024 federal budget providing funding to initiate the hiring of a dedicated USDA staff for US SHIP, similar to NPIP.

With 36 participating states and over 11,500 swine production sites representing approximately two-thirds of the US swine population already enrolled in US SHIP, the US swine industry has demonstrated the interest and need for a national health certification program.

The initial objectives for US SHIP are to develop and implement an African Swine Fever (ASF)-Classical Swine Fever (CSF) Monitored Certification of US pork production operations (farm sites and slaughter facilities) to mitigate risks of disease introduction and provide a practical means for demonstrating evidence of freedom of disease (outside of foreign animal disease control areas) in support of ongoing interstate commerce and a pathway towards the resumption of international trade over the course of a trade impacting disease response and recovery period. However US SHIP can also support endemic disease certification. A PEDV breakout session and proposed resolution on PEDV will be forthcoming at the House of Delegates this year.

US SHIP is designed to be applicable across the full-spectrum of US pork industry participants from the small show pig farmer to the larger commercial producers, live animal marketing operations, and slaughter facilities. Deriving program standards that are relevant to and enabling participation across the full-breadth of US commercial pork industry participants is essential. A critical mass of participation is a foundational element necessary for being able to represent the health status of domestic pig production operations across supply chains, areas, states, and regions.

The development of the US SHIP program has been supported and endorsed by the National Pork Producers Council, National Pork Board, Meat Institute, United States Animal Health Association, American Association of Swine Veterinarians, and the American Association of Veterinary Laboratory Diagnosticians and in March of 2023 the National Pork Forum unanimously passed a resolution encouraging all pork producers to enroll in US SHIP.

In summary, the ASF-CSF Monitored certification will establish a national playbook of technical standards and associated certification recognized across participating states that centers on disease prevention and demonstration of freedom of disease outside of control areas in support of animal health, commerce, and trade.

The time for such a national strategy is now!

Acknowledgments

The US SHIP development project investigators and staff would like to thank the myriad of industry, state, and federal partners that have volunteered their time, subject matter expertise, and energies towards informing the development of a US SHIP customized to meet the needs of the 21st century US pork industry.

Since its inception in late 2020, US SHIP has utilized the engagement and contributions of the ***more than 250 US pork industry participants*** (e.g., producers, packers, veterinarians, nutritionists, VDLs / academia, and state and federal veterinary medical officials) from across the US. The expertise and dedication of the individuals that have participated in technical working groups, pilot projects, research endeavors, or served in an advisory capacity have been exemplary.

The collaboration and support provided by the National Pork Board, National Pork Producers Council, Meat Institute, United States Animal Health Association, Swine Health Information Center, and the American Association of Swine Veterinarians has been nothing short of tremendous and foundational towards moving this precedent setting endeavor forward.

A special word of thanks to the National Pork Board for the provision of funding to off-set the costs to host (meals and convention hall meeting rooms) this 4th US SHIP HOD meeting.

Also, a word of thanks to US SHIP Technical Committee Working Group Leaders that have facilitated the process of developing the proposed updates to the Program Standards and the Resolutions to be discussed and considered further at this US SHIP HOD.

And finally, many thanks to the US SHIP General Conference Committee which was elected at the 2023 HOD and have dedicated considerable time and effort in providing guidance and direction for the program as it progresses towards a USDA codified program.

US SHIP General Conference Committee:

Mike Walker, North Central region – **Chair**
Ryan Pudenz, At-large – Vice chair
Mary Battrell, South Atlantic region
Don Davidson, North Atlantic region
Jesse Heimer, At-large Exhibition Swine
Christine Mainquist-Whigham, Western region
Mike Paustian, Central region
AV Roth, East Central region
Katie Stack, At-large Packer/Slaughter Facility

Meeting Objectives

US SHIP House of Delegates Participant,

Thank you for attending the 4th US SHIP House of Delegates (HOD) meeting that is being held at the DoubleTree by Hilton in Bloomington, MN.

Objectives of this forum of US pork industry stakeholders:

1. Further introduce and orientate interested US pork industry, state, and federal partners to this US Swine Health Improvement Plan (US SHIP).
2. Review, discuss, and vote upon proposed updates to the Program Standards and a series of Resolutions being brought forth for consideration.
3. Provide participatory based input towards US SHIP program content, and to determine additional items of high relevance related to US swine health and foreign animal disease preparedness, including the consideration to expand beyond the current scope of ASF/CSF to include PEDV, which would establish the first certification for an endemic disease.
4. Share current updates and transitional plans for ramping US SHIP to an officially recognized USDA Swine Health Program.

The US SHIP HOD is a decision-making body composed of US pork industry participants and subject matter experts that aim to represent the interests of pork industry stakeholders across each of the states that have expressed an interest in participating in US SHIP. As of July 15, 2024, 36 states have expressed interest to participate, and a total 249 voting delegate invitations have been extended to participate in this 4th US SHIP HOD.

Each state expressing interest has been allocated a specified number of voting delegates and the opportunity to invite up to 2 non-voting guests to attend the US SHIP HOD meeting. The voting delegate allocation includes a baseline allocation to each state, as well as an allocation proportionate to the capacity (inventory) of the Breeding Herd and Growing Pig production sites (respectively) enrolled in US SHIP that are located in each respective state.

Official State Agencies (OSAs) in conjunction with their state pork producer associations have been asked to seek volunteers to serve as voting delegates or non-voting guests in this US SHIP HOD. Each participating state's voting delegation is to be inclusive of the State Animal Health Official or their designee. State level participation in this US SHIP development project will be determined by the State Animal Health Official. Delegates must be present to vote at the US SHIP HOD.

Individual delegates attending the US SHIP HOD cannot cast more than one vote or cast votes on other delegates' behalf (i.e., one person/delegate = one vote). Please reach out to your respective US SHIP OSA or state pork producer association if you would like to be considered as a voting delegate or non-voting guest.

The US SHIP development project investigators, staff, and technical committees have worked earnestly to ensure the Program Standards and Resolutions being set forth for consideration represent practical and tangible improvements to the current industry status quo for animal health.

US SHIP OSAs and US SHIP HOD meeting participants are encouraged to review and discuss the proposed Program Standards and Resolutions to be considered within their respective places of business and collectively prior to the US SHIP HOD meeting in September. In addition, the 2024 HOD will include elections for three (3) of the nine (9) General Conference Committee (GCC) positions.

As you have the opportunity to review the enclosed information, the US SHIP office would certainly welcome any questions, suggestions, or concerns.

US SHIP Contact Information:

Email: usship@iastate.edu

Phone: 515-294-8611

Website: usswinehealthimprovementplan.com

Thank you again for your interest in volunteering your time and insight towards helping form and shape this precedent setting endeavor that has the overarching goal of establishing a sustainable platform for safeguarding, certifying, and bettering the health of US swine and longer-term competitiveness of the US pork industry.

US Swine Health Improvement Plan Development Project Investigators and Staff.

Meeting Agenda

Tuesday, September 3th

- 1:30 pm — US SHIP Registration Table Open
- 3:00 pm — US SHIP Official State Agency Session (both SAHO's & Sate Execs)
 - *Best practices – data management, advancing enrollment & certification, SSVdb usage.*
 - *Transition plans from pilot to codified program and beyond*
- 6:00 pm — US SHIP Reception

Wednesday, September 4th

- 6:30 am — Continental breakfast
- 8:00 am — General Session
 - Welcome, agenda/objectives, and US SHIP year in review
 - HOD agenda/objectives, brief US SHIP year in review
 - Welcome – Minnesota/GCC – Mike Walker, GCC chair
 - Welcome – Minnesota/NPPC board president
 - NPB priorities in support of US SHIP
 - USDA APHIS update
 - NPIP, the model for US SHIP
 - Traceability level set – What is the “End-Game”?
- 10:00 am — Break: coffee and refreshments
- 10:30 am — Breakout Session I
 - Traceability
 - Feed Biosafety
 - Biosecurity Site Plans - Feral Pig/SPS
- 12:00 am — Lunch
- 1:30 pm — Breakout Session II
 - Sampling and Testing - Surveillance
 - US SHIP Governance - GCC, operations, and USDA transition
 - PEDV Elimination Task-Force
- 3:00 pm — Break: coffee and refreshments
- 3:30 pm — Breakout Session III
 - Swine Exhibition
 - Market Haul Sanitation
 - Site status verification database use - Packer/SAHO
- 6:00 pm — Cash Bar
- 6:30 pm — Banquet - Swine Exhibition – Who are we and why do we matter?

Thursday, September 5th

- 6:30 am — Continental breakfast
- 8:00 am — General Session
- Breakout session highlights
 - US SHIP Governance - GCC
 - PEDV Elimination Task-Force
 - Site status verification database use - Packer/SAHO
 - Swine exhibition
 - Market Haul Sanitation
 - Biosecurity Site Plans - Feral Pig/SPS
 - Feed Biosafety
 - Sampling and Testing - Surveillance
 - Traceability
- 9:15 am — Break
- 9:45 am — Business Meeting Agenda
- Call to Order, Meeting Procedures, 2023 HOD Minutes
 - GCC elections: Regions 3 and 4, Exhibition Swine
 - Program Standards
 - 2024-1 (Surveillance): PIN, Site Name and State on Diagnostic Submissions
 - 2024-2 (Governance): Site Status Verification Database Reporting
 - 2024-3 (Governance): Certification vs Enrollment for At-Large Delegates
 - Resolutions
 - 2024- 1 (Surveillance): Options for use of aggregate samples in Breeding Herds
 - 2024-2 (Feed Biosafety): Expand Imported Feed Ingredients pilot
 - 2024-3 (Biosecurity Site Plans): Synergies with Secure Pork Supply Plan for Pigs with Outdoor Access
 - 2024-4 (Traceability): Extent pilot for building towards a national program of traceability in US Swine
 - 2024-5 (Traceability): SAHO working group to define pathway for using a US SHIP Compliant Repositories of Inter-Premises Swine Movement Records as an acceptable approach for meeting reporting requirements
 - 2024-6 (PEDV Elimination Task-Force): Explore option of a PEDV health status certification
 - 2024-7 (Indiana Delegation): GCC membership – consider rotating/non-voting GCC member
 - GCC Election Results
 - Business meeting adjourned
- Closing Session - Next Steps for US SHIP & Vision for the Future
- 12:00 pm — HOD Adjourned

Summary of Program Standards

Program Standards

A summary of the program standards are listed below. These are the requirements for conferring the US SHIP ASF-CSF Monitored Certification to participating Production Sites and Slaughter Facilities.

Note: Slaughter facilities will not be required to have 100% of their supply chain originating from ASF-CSF Monitored Certified production (farm) sites to participate in US SHIP..

ENROLLMENT:

- Participating premises are to be enrolled with the US SHIP Official State Agency (US SHIP OSA) in the state in which the premises is located.

VETERINARY SERVICE PROVIDER:

- Producers are to maintain a valid veterinary client-patient relationship with a licensed and federally accredited veterinarian.

TRACEABILITY:

Premises level information

- Premises level demographic information for each participating premises is to be complete, accurate, current, and on-file with the US SHIP Official State Agency in which the premises is located.

The minimum required demographic information to be recorded for each premises is:	
<input checked="" type="checkbox"/> Premise Identification Number (PIN)	<input checked="" type="checkbox"/> Site Owner Contact Information
<input checked="" type="checkbox"/> Premise Type (Boar Stud, Breeding Herd, Farrow-Feeder/Finish, Growing Pig, etc.)	<input checked="" type="checkbox"/> Common Name of Site
<input checked="" type="checkbox"/> Site Location Information: Latitude and Longitude 911 Street Address, if one has been assigned	<input checked="" type="checkbox"/> Expected Site Capacity (Number of Breeding Swine and/or Growing Pigs)
<input checked="" type="checkbox"/> Date of last usage of the site by swine owner (if applicable)	<input checked="" type="checkbox"/> Date of initial enrollment of the site in US SHIP, or date of first usage of the site by current swine owner

TRACEABILITY: CONT.

Swine movement information

- Participants are to maintain records of the intrastate and interstate movements of live swine into and out of each participating premises.
- Participants must demonstrate competency in providing at least 30 days of movement information electronically in a common format (e.g., a prescribed CSV file) to the US SHIP Official State Agency in a timely manner (e.g. < 72 hours).

For participants with multiple participating premises within a given state, such competency can be demonstrated on a site-by-site basis or en-masse.

The minimum information required to be recorded for each movement is:		
<input checked="" type="checkbox"/> Date of movement	<input checked="" type="checkbox"/> Origin State	<input checked="" type="checkbox"/> Origin PIN
<input checked="" type="checkbox"/> Destination State	<input checked="" type="checkbox"/> Destination PIN	<input checked="" type="checkbox"/> Head in movement (Only when needed to Meet a Regulatory Reporting Requirement)
<input checked="" type="checkbox"/> Animal type in movement		

Semen movement information

- Boar stud premises participants are to maintain records of the intrastate and interstate movements of semen distributed out of each participating premises.
- Participants must demonstrate competency in providing at least 30 days of movement information electronically in a common format (e.g., a prescribed CSV file) to the US SHIP Official State Agency in a timely manner (e.g. < 72 hours).

For participants with multiple participating premises within a given state, such competency can be demonstrated on a site-by-site basis or en-masse.

The minimum information required to be recorded for each movement is:		
<input checked="" type="checkbox"/> Date of movement	<input checked="" type="checkbox"/> Origin State	<input checked="" type="checkbox"/> Origin PIN
<input checked="" type="checkbox"/> Destination State	<input checked="" type="checkbox"/> Destination PIN	<input checked="" type="checkbox"/> ± Number of units in shipment (Only when needed to Meet a Regulatory Reporting Requirement)

Animal Identification

- Certified ASF-CSF monitored participants must comply with existing state and federal laws regarding animal/group/lot identification.

BIOSECURITY:

Feed Biosafety

In the event of an ASF or CSF incursion into the US (ASF/CSF Risk Level 3; immediately after incursion, or if state/region positive), participants are to implement a temporary cessation of feeding spray-dried plasma, blood meal, meat and bone meal, intestinal peptide products, or other meal-based feedstuffs that have the potential to be of porcine origin.

This temporary cessation will be lifted if ingredients described above are sourced from:

- a. Suppliers with enhanced post-processing biosafety measures in place^{1,2}
- b. States or regions at ASF/CSF Risk Level 2 (Operations normalizing, State or Region negative).
- c. US returns to ASF/CSF Risk Level 1 (US Negative).

¹ Requirements of post-processing treatment facilities: Enhanced post-processing treatment must occur at facilities that have premises level segregation from: Premises in which protein sources of porcine origin were initially heat treated (rendered or spray-dried) in accordance with feed grade safety requirements. AND Finished feed facilities manufacturing feed for swine.	² Approved post-processing treatments: Thermal processing OR Ingredient quarantine/holding time and temperature
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Enrollment Survey (Biosecurity Practices)

- At enrollment, participating premises will complete a survey to provide a simplistic categorization of some of the high-level biosecurity practices being implemented at the premises. Information from this survey is to provide quantitative data to assess current standards of practice across a broad spectrum of program participants. Results will help provide insight towards consideration of additional biosecurity related program standards in the future.

Feed Supply

- The feeding of swill, garbage, or table waste that has the potential to include meat products is strictly prohibited.

Personnel

- Permissioned individuals that have recently been exposed to livestock, feral/wild pigs or slaughter facilities in ASF/CSF/FMD positive regions or countries abroad should only visit farms or slaughter facilities in the US after observing a 5-day downtime since arriving in the US, and donning PPE (boots/coveralls, etc.) provided by farm site or slaughter facility being visited.

BIOSECURITY: CONT.

Secure Pork Supply Site Plans

- ☑ Boar Stud, Breeding Herd, Farrow to Feeder, Farrow to Finish, and Growing Pig sites (US SHIP Production Site Types) must be able to provide access to a completed Secure Pork Supply Biosecurity Plan to the OSA within 24 hours of the request.

SAMPLING AND TESTING (DISEASE SURVEILLANCE):

- ☑ Sampling and Testing Requirements of Participants

- ☑ Maintain compliance with ASF-CSF Sampling and Testing Requirements

US SHIP sampling and testing requirements will *vary by Production Site Type* and the *ASF-CSF status* of the US, State, or Region (**Tables 1, 2, and 3**).

The program is based on targeted testing of animals of poor or sub-standard health. Targeted sampling enhances both the efficiency of detection and the simplicity of sample collection across the spectrum of commercial and non-commercial farms in the U.S.

The frequency of on-site sampling is a function of time and is independent of the timing of pig movement, thereby providing for a uniform and continuous system of disease monitoring across production sites, areas, and regions.

US SHIP ASF-CSF tests are to be used for screening purposes only. Non-negative results would result in the testing laboratory (USDA NAHLN lab certified to conduct ASF-CSF testing) contacting the appropriate State and Federal animal health officials to initiate a Foreign Animal Disease Investigation (FADI) for the collection of additional samples for official ASF-CSF testing (confirmatory) purposes.

Table 1. Sampling and Testing Requirements for ASF-CSF Risk Level 1.

<div style="background-color: black; color: white; padding: 5px; font-weight: bold;">ASF/CSF Status = Level 1, US Negative (Peace Time)</div>				Sampling & Testing Requirements (Alternative Options)		
				Option 1 Individual Only		Option 2 Aggregate Only (Group or Pen)
Production Site Type	Specimen Type(s)	I or A ¹	Frequency / Timing of Sampling	# of Individuals	# of Pools (Groups of up to 5)	# of Samples
Boar Stud Mature Boars, Distributing Semen, ± On-Site Isolation	Oral Swab Blood Swab Oral Fluids	I I I		No Additional Sampling and Testing Required		
Breeding Herd Breed to Wean, Breeding/ Gestation/ or Farrow Only, ± On-Site GDU or Isolation	Oral Swab Blood Swab Oral Fluids	I I I		No Additional Sampling and Testing Required		
Growing Pig Nursery, Grower, Finisher, Isolation	Oral Swab Blood Swab Oral Fluids	I I A		No Additional Sampling and Testing Required		
Farrow to Feeder Farrow to Finish	Requirements of Breeding Herd + Growing Pig In Numbers, and Growing Pig Only in Frequency					
Small Holding ≥ 100 or < 1,000 Breeder or Feeder Swine	Oral Swab Blood Swab Oral Fluids	I I I or A		No Additional Sampling and Testing Required		
Non-Commercial < 100 Breeder or Feeder Swine.	Oral Swab Blood Swab Oral Fluids	I I A		No Additional Sampling and Testing Required		

¹ I = Individual Sample, A = Aggregate (Group or Pen) Sample

Table 2. Sampling and Testing Requirements for ASF-CSF Risk Level 2.

**ASF/CSF Status = Level 2,
US Positive, Operations Normalizing, and
State or Region Negative (All US SHIP
Testing is outside of Control Areas)**

Sampling & Testing Requirements (Alternative Options)

Production Site Type	Specimen Type(s)	I or A ¹	Frequency / Timing of Sampling	Option 1 Individual Only		Option 2 Aggregate Only (Group or Pen)
				# of Individuals	# of Pools (Groups of up to 5)	# of Samples
Boar Stud Mature Boars, Distributing Semen, ± On-Site Isolation	Oral Swab Blood Swab Oral Fluids	I I I	2X per month	10	2	-
Breeding Herd Breed to Wean, Breeding/ Gestation/ or Farrow Only, ± On-Site GDU or Isolation	Oral Swab Blood Swab Oral Fluids	I I I	Monthly	10	2	-
Growing Pig Nursery, Grower, Finisher, Isolation	Oral Swab Blood Swab Oral Fluids	I I A	Monthly	10	2	2
Farrow to Feeder Farrow to Finish	Requirements of Breeding Herd + Growing Pig In Numbers, and Growing Pig Only in Frequency					
Small Holding ≥ 100 or < 1,000 Breeder or Feeder Swine	Oral Swab Blood Swab Oral Fluids	I I I or A	Monthly	5	1	1 per 500, or 2 if > 500 pigs
Non-Commercial < 100 Breeder or Feeder Swine	Oral Swab Blood Swab Oral Fluids	I I A	Quarterly	5	1	1

¹ I = Individual Sample, A = Aggregate (Group or Pen) Sample

Table 3. Sampling and Testing Requirements for ASF-CSF Risk Level 3.

**ASF/CSF Status = Level 3,
US Positive, Immediately After Incursion,
or if State or Region Positive. (All US
SHIP Testing is Outside of Control Areas)**

Sampling & Testing Requirements (Alternative Options)

Production Site Type	Specimen Type(s)	I or A ¹	Frequency / Timing of Sampling	Option 1		Option 2
				Individual Only		Aggregate Only (Group or Pen)
				# of Individuals	# of Pools (Groups of up to 5)	# of Samples
Boar Stud Mature Boars, Distributing Semen, ± On-Site Isolation	Oral Swab Blood Swab Oral Fluids	I I I	Weekly	10	2	-
Breeding Herd Breed to Wean, Breeding/ Gestation/ or Farrow Only, ± On-Site GDU or Isolation	Oral Swab Blood Swab Oral Fluids	I I I	2X per month	10	2	-
Growing Pig Nursery, Grower, Finisher, Isolation	Oral Swab Blood Swab Oral Fluids	I I A	Monthly	20	4	1 per 500 pigs with maximum of 8 per site
Farrow to Feeder Farrow to Finish	Requirements of Breeding Herd + Growing Pig In Numbers, and Growing Pig Only in Frequency					
Small Holding ≥ 100 or < 1,000 Breeder or Feeder Swine	Oral Swab Blood Swab Oral Fluids	I I I or A	Monthly	10	2	1 per 500, or 2 if > 500 pigs
Non-Commercial < 100 Breeder or Feeder Swine	Oral Swab Blood Swab Oral Fluids	I I A	Monthly	5	1	1

¹ I = Individual Sample, A = Aggregate (Group or Pen) Sample

SAMPLING AND TESTING (DISEASE SURVEILLANCE): CONT.

- ☑ Incorporating Use of USDA ASF/CSF Active Surveillance of Case Compatible Submissions to Veterinary Diagnostic Labs Into the US SHIP ASF/CSF Monitored Certification Program.

Additional Program Administrative Requirement for US SHIP Sampling & Testing:

ASF/CSF test records of case-compatible submissions from US SHIP ASF/CSF Monitored premises included in the USDA ASF/CSF Active Surveillance program (i.e., routine screening of case-compatible submissions made to veterinary diagnostic labs in the National Animal Health Lab Network) are to be collated, summarized and made available in near-real time to the appropriate stakeholder audiences. The US SHIP Official State Agencies and State Animal Health Officials Premises are to be provided access to the total number and specific US SHIP ASF/CSF Monitored premises being surveilled via this surveillance stream in their state. Aggregate level summaries (state level data) of the total number tests of and total number of US SHIP ASF/CSF Monitored premises being surveilled via this USDA ASF/CSF Active Surveillance program are to be made available to broader US pork industry stakeholder audiences.

Notes:

- This US SHIP Program Administrative Requirement will become effective upon the completion of the necessary software related integrations that are anticipated to be completed in CY 2024.
- US SHIP Program Administrative Requirements are relevant to all US SHIP Sampling and Testing. However, the initial focus of this requirement and associated deliverables centers on US SHIP ASF/CSF Risk Level 1 (ASF/CSF Not Present in US / Peacetime).
- This US SHIP Program Administrative Requirement does not have any impact on the means (current standard practices used) in which Submitting Veterinarians and Program Participants are routinely receiving tests result information from their veterinary diagnostic lab service providers.

Proposed Updates to Program Standards

Definition: Program Standards: Requirements to be met or exceeded by enrolled producers and slaughter facilities to be certified in US SHIP.

Approval of Program Standards requires super-majority (2/3) vote by the US SHIP HOD.

The current US SHIP Program Standards are available on the US SHIP website under Documents (usswinehealthimprovementplan.com).

SUBMITTED BY: US SHIP Sampling & Testing Working Group

SUBJECT MATTER: Inclusion of Site Name, Premises Identification Numbers (PIN) and State on US SHIP Qualifying Submissions to NAHLN Labs

PROPOSED STANDARD:

The Site Name, Premises Identification Number (PIN), and State where the animals being tested are located are required to be included on US SHIP Qualifying Submissions made to veterinary diagnostic labs.

Definitions associated with this Proposed Standard:

US SHIP Qualifying Submissions for the ASF/CSF Monitored Certification:

Risk Level 1 (Peacetime):

- Case compatible (sick pig) submissions¹

Risk Level 2 and Risk Level 3 (In event of an introduction of ASF/CSF into US):

- Case compatible (sick pig) submissions¹
- All submissions made for meeting the testing requirements to maintain the ASF/CSF Monitored certification.

¹**Case-compatible submissions:** These are case submissions being made to veterinary diagnostic labs to identify the cause of clinically ill swine or increased mortality on swine farms that include the following:

- Adequate case history of the clinical observations of the clinical disease and/or increased mortality being observed.

and

- One or more of the appropriate samples types (i.e., Spleen or Spleen Pulp Swabs, Tonsil, Lymph Node, or Whole Blood or Blood Swab) taken from the clinically affected animal(s) being evaluated.

Note: The veterinary diagnostic lab (i.e., lab in the USDA's National Animal Health Lab Network) will assess the clinical case history and specimens provided to determine inclusion in the USDA ASF CSF Active Surveillance of case-compatible (sick pig) submissions to veterinary diagnostic labs.

Background/Reason:

The *Site Name*, *Premises Identification Number (PIN)*, and *State* where the animals being tested are located are the baseline minimum of premises-level demographic information needed to be included in the submissions to veterinary diagnostic labs for the ASF/CSF PCR test results associated with the ASF/CSF Monitored Certification to be duly captured, recognized, and made available to the appropriate US SHIP Official State Agency (OSA).

Baseline premises level demographic information required in diagnostic submissions:

Premises Identification Number (PIN) = Is the unique premises level identifier being used across the entirety of the US SHIP program and is required for identifying the resulting ASF/CSF test results as being derived from a US SHIP participating premises.

State: Enables the routing of the ASF/CSF test results derived from participating premises to the appropriate US SHIP OSA.

Site Name: Provides the US SHIP OSA a secondary, human readable, and more intuitive means for understanding the premises in which the samples were derived.

Additional Notes:

1. Incorporating these three baseline premises level identifiers inclusion in the submissions to veterinary diagnostic labs as program standard is fully aligned with the updated Program Administrative Standard entitled “Incorporating Use of USDA ASF/CSF Active Surveillance of Case Compatible Submissions to Veterinary Diagnostic Labs Into the US SHIP ASF/CSF Monitored Certification Program” that was passed at the 2023 US SHIP HOD.
2. This proposed program standard would be useful in helping raise producer, practitioner, and diagnostician awareness of and participation in the “USDA ASF/CSF Active Surveillance of Case Compatible Submissions to Veterinary Diagnostic Labs” surveillance stream.
3. This proposed program standard (related to submissions within the scope of the US SHIP ASF/CSF Monitored Certification) will be useful toward enhancing the adoption of practices, methods, and systems used for including this critically important premises level demographic information when making submissions to veterinary diagnostic labs. Establishing such best practices as a component of day-to-day operations in peacetime is the most critical component for truly enhancing emergency or foreign animal disease preparedness.
4. SAHO’s & OSA’s: “Submission Level Identifiers” (e.g., Veterinarian, Veterinary Clinic, Animal Owner or Managing Entity Name) and “Premises Level Identifiers” (site name, site address, & PIN) and “Animal or Sample Level Identifiers” that are received with the submission record to the veterinary diagnostic labs are also included in the resulting ASF/CSF test records made available to the appropriate US SHIP OSA & SAHO.

SUBMITTED BY: US SHIP General Conference Committee

SUBJECT MATTER: US SHIP Official State Agencies (US SHIP OSA) requirement to report and keep the status of the US SHIP certifications held by the participating sites current in the US SHIP Site Status Verification Database.

PROPOSED STANDARD:

The status of the US SHIP health status certifications held by participating premises are as reported to the US SHIP Site Status Verification Database from the US SHIP Official State Agencies.

US SHIP Official State Agencies are to report the current (most up to date) status of the US SHIP certifications held by the participating sites in their respective state to the US SHIP Site Status Verification Database.

Data elements to be reported to the US SHIP Site Status Verification Database:

- Premises Identification Number (PIN)
- State: the state where the Premise is located
- US SHIP ASF Monitored status: Monitored Free, Certification Expired, or Inactive
- US SHIP CSF Monitored status: Monitored Free, Certification Expired, or Inactive

Premises not reported to the US SHIP Site Status Verification Database are not recognized as holding a US SHIP health status certification.

Background/Reason:

This item is being brought forward as a Program Standard to facilitate discussion and clarify this requirement for the US SHIP OSAs to report the status of the US SHIP health status certifications held by the participating premises in their respective state to the US SHIP Site Status Verification Database.

The US SHIP Site Status Verification Database is a built for purpose database application that provides a simplistic means for maintaining the current and officially recognized status of the US SHIP certifications held by the participating sites from across the US (**Addendum 1**).

As described in this proposed program standard, only a minimum set of data fields are to be reported by the US SHIP Official State Agencies (OSAs) to the US SHIP Site Status Verification Database. All of the more detailed participant and premises level specific identifiers (e.g., names, addresses, locations, etc.) remain with the respective US SHIP OSA and ***are not*** reported to or contained in the US SHIP Site Status Verification Database.

The US SHIP Site Status Verification Database application was developed in 2023, stemming from an action item (program development need) discussed at the US SHIP 2022 HOD, and is currently being onboarded for use on a State-by-State basis.

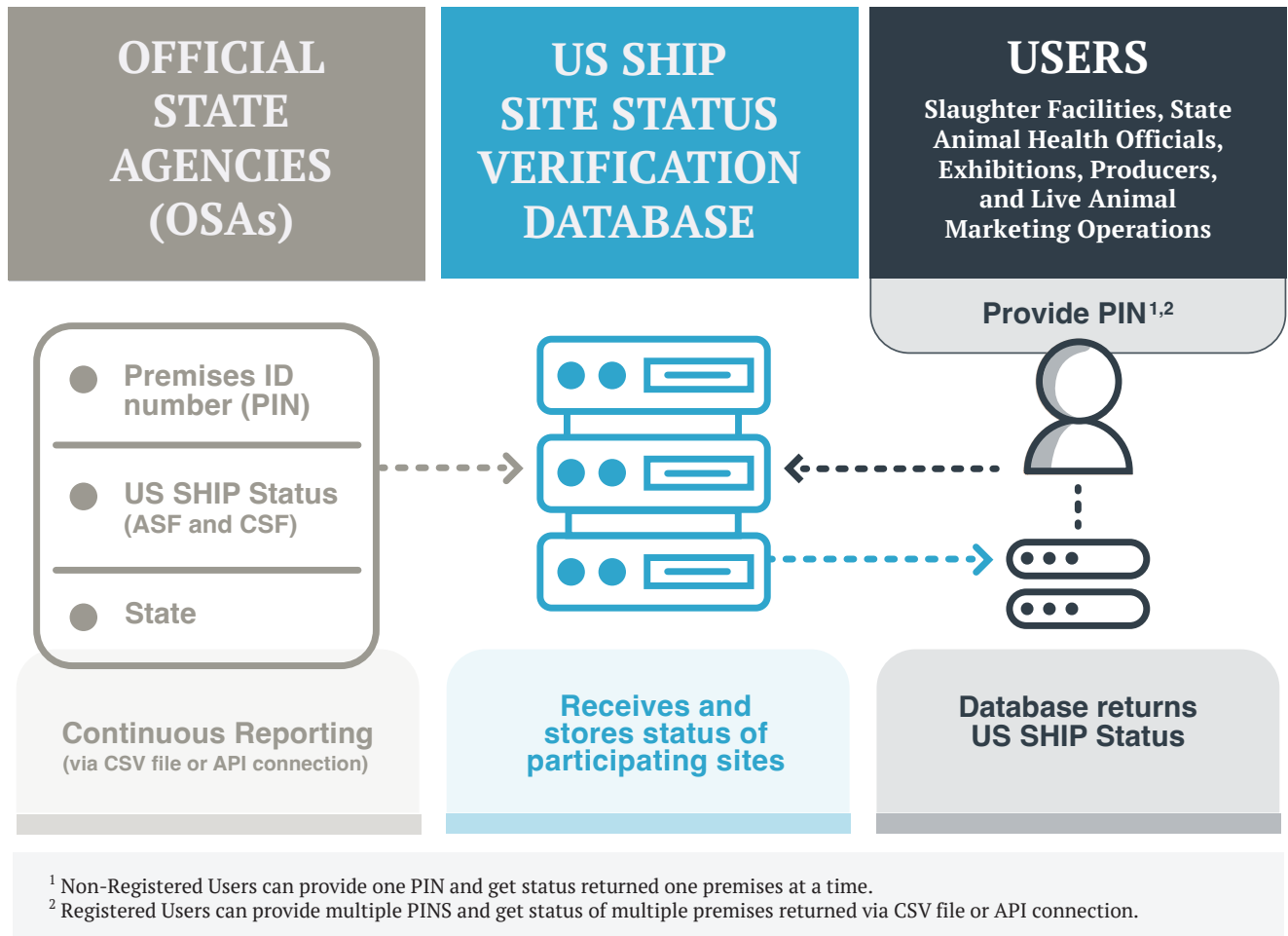
The US SHIP HOD resolution 2023-5 requested to explore alternative approaches of how US SHIP OSAs could report the status of participating premises in the states that have a state-based statute that was not allowing them to report such information to a third-party database application. Two alternative approaches were identified as solutions and are now being used by OSAs to report the status of the US SHIP health status certifications held by participating premises. The two additional (alternative) approaches for OSAs are:

- a. A legal agreement can be established between the US SHIP OSA and Iowa State University, which **currently** houses the US SHIP Site Status Verification Database. Iowa is an example of a state that took advantage of this approach.
- b. Add a check box in the US SHIP enrollment form giving US SHIP OSA permission to report the participant sites (premise ID) and the status of the US SHIP health status certifications held. Kansas is an example of a state using this approach.
 - Based on interaction with US SHIP OSAs the US SHIP Program Administration suggests the following language to be included as a check box on US SHIP enrollment forms:
 - “As a US SHIP participant, I hereby grant permission for the US SHIP OSA to share the PIN(s) and status of US SHIP health status certifications for the premises of which I have enrolled to the US SHIP Site Status Verification Database.”

ADDENDUM 1

The basic workings and use of the US SHIP Site Status Verification Database are pictorialized and described below.

US SHIP Site Status Verification Database Application



The US SHIP Site Status Verification Database provides end-users a simplistic means to verify the status of the US SHIP certifications held by participating premises.

End users simply provide the Premises Identification Number (PIN) of the premises in question, and the US SHIP Site Status Verification Database application returns the status of the US SHIP certifications held by that premises.

End users and use cases of the US SHIP Site Status Verification Database include:

- State Animal Health officials can use to verify status of the US SHIP certifications held by premises moving pigs into their state for further breeding, growing, or exhibition.
- Slaughter facilities can use to verify the status of the US SHIP certifications held by the premises supplying pigs to their facility to be harvested.
- Exhibitions can use to verify the status of the US SHIP certifications held by the premises pigs are being exhibited/shown.
- Live animal marketing operations channels can use to verify the status of the US SHIP certifications held by the premises supplying pigs to their facility.
- Producers can use to verify the status of the US SHIP certifications held by either their own premises or the premises of pigs of which they are purchasing or otherwise receiving pigs from third parties.

Key Point of Functionality the US SHIP Site Status Verification Database application for End Users = End users query the database via providing the PIN of the premises in question, and the database application simply returns the current status of the US SHIP certifications held by the premises (PIN) in question.

The US SHIP Site Status Verification Database application is a built for purpose database application that is readily compatible with and independent of, whatever software/database application or other means the US SHIP OSAs from across the country are using to house the participant/premises specific information and manage the workings of the US SHIP OSA in their respective state.

The US SHIP OSAs are the only entities permissioned to report the status of the US SHIP certifications held by the participants in their respective state to the US SHIP Site Status Verification Database.

The US SHIP Program Administration is responsible for managing the services provided by the US SHIP Site Status Verification Database.

The US SHIP Site Status Verification Database is currently being housed and maintained within the information technology infrastructure used to support the Department of Veterinary Diagnostic and Production Animal Medicine at the Iowa State University College of Veterinary Medicine.

SUBMITTED BY: US SHIP General Conference Committee

SUBJECT MATTER: US SHIP House of Delegates voting delegate allocation of At-Large Breeding Herd and Growing Pig Delegates based upon *certification* (vs enrollment) beginning in 2025.

PROPOSED STANDARD:

Proposed Update To Existing US SHIP Program Governance Standard:

Current:

The pool of At-large delegates is allocated to states as a percentage of all Breeding Swine and Growing Pigs (respectively) *enrolled* in US SHIP that are located in a given state.

Proposed Update: (To become effective for 2025 US SHIP HOD)

The pool of At-large delegates is allocated to states as a percentage of all Breeding Swine and Growing Pigs (respectively) *certified* in US SHIP that are located in a given state.

Background:

The US SHIP voting delegate allocation is a formula-based approach using a combination of a baseline allocation of delegates to all participating states as well as the generation of a pool of At-Large Breeding Herd and Growing Pig Delegates.

During the current start-up phase of US SHIP, the At-large delegate allocation has been based on enrollment, as the US SHIP Official State Agencies have been at various stages of beginning to certify the participants in their respective states.

US SHIP is a program for “certifying” the health of US swine in accordance with a well-defined and common set of standards. The proposed change here aims to be consistent with the need for the US SHIP to transition from a start-up endeavor to an officially recognized program for “certifying” the health of US swine. Looking forward, it will be the US SHIP health status certification(s) held by the participating premises that will derive the recognition and value for participants. Enrollment alone will not bring value or recognition by third-parties.

Thus, the proposed update serves to have the At-large delegate allocation be reflective “certification” rather than enrollment.

Resolutions

Definition: Resolutions: Charges to pursue initiatives or further explore specific issues that aim to further inform US SHIP program content and direction.

Approval of Resolutions require majority vote by the US SHIP HOD.

It should be understood that US SHIP is an industry, state, and federal partnership en-route to be a USDA Swine Health Program (modeled after NPIP's longstanding system of shared governance) that centers on certifying the health of US swine in accordance with well-defined program standards.

Any project-based work involving research, new system development, collaborative forums, outreach, education, and advocacy for US SHIP related efforts are only possible through the support and self-evident synergies working in partnership with the national pork producer, packer, and swine veterinary organizations (i.e., National Pork Board, National Pork Producers Council, Swine Health Information Center, Meat Institute, and the American Association of Swine Veterinarians).

The Resolutions passed at previous US SHIP HODs are available on the US SHIP website under Documents (usswinehealthimprovementplan.com).

RESOLUTION NUMBER: 2024 - 1
SUBMITTED BY: US SHIP Sampling & Testing Work Group
SUBJECT MATTER: Explore Utility of Aggregate Samples as a Complementary Surveillance Tool to the Individual Sick Sow Testing in Commercial Scale Breeding Herds as Part of the ASF/CSF Risk Level 2 and 3 Testing Requirements.

WHEREAS, The 2024 outbreak of High-Path Avian Influenza in US dairy cattle has further exposed and reinforced the potential for using aggregate samples (i.e., bulk milk tank samples in the case of dairy farms) as a highly effective and efficient means for herd-level monitoring of pathogens of high consequence.

WHEREAS, Aggregate samples (e.g., most notably Oral Fluids, and Processing Fluids) have a well-studied and well documented track-record of success and are being used at scale for herd-level health status monitoring applications in commercial scale breeding farms across the US.

WHEREAS, Robust surveillance methods for enhancing the probabilities of early detection of circulating virus in commercial scale breeding herds weaning pigs off-site is especially important due to the recurring weaning events that involve distributing weaned pigs to any number of different locations.

Now, therefore be it RESOLVED:

The U.S. SHIP House of Delegates supports moving forward with efforts to fully vet the potential utility of incorporating aggregate samples (e.g. oral fluids, processing fluids, et al) as a complimentary surveillance tool to the individual sick sow testing in commercial scale breeding herds as part of ASF/CSF Risk Level 2 and 3 testing requirements.¹

A producer led effort (facilitated with assistance US SHIP Sampling and Testing Working Group) that is inclusive of interested pork producers, swine veterinarians, diagnosticians, state animal health officials, and USDA veterinarians from Swine Staff, NAHLN, and FADDL should be convened to fully vet the potential for incorporating aggregate samples as a complementary surveillance tool to the individual sick sow sampling in the ASF/CSF Risk Level 2 and 3 testing requirements of the US SHIP ASF/CSF Monitored Certification.

This working group's findings, recommendations, and any potential proposed updates to the ASF/CSF Monitored testing requirements should be brought forward for consideration at the 2025 US SHIP HOD.

Footnotes:

'Definitions of US SHIP ASF/CSF Risk Levels:

ASF/CSF Risk Levels 1 = US Negative

ASF/CSF Risk Level 2 = US Positive, Operations Normalizing, State or Region Negative

ASF/CSF Risk Level 3 = US Positive, Immediately After Incursion, or if State or Region Positive.

Note: All testing for US SHIP ASF/CSF Monitor Certification is Outside of Control Areas

RESOLUTION NUMBER: 2024 - 2
SUBMITTED BY: US SHIP Feed Biosafety Working Group
SUBJECT MATTER: Continuation of a broadly applicable Feed Ingredient Import pilot program across a substantive subset of US pork industry participants and feed industry stakeholders.

WHEREAS, The US Swine Health Improvement Plan (SHIP) is a collaborative effort involving industry, state, and federal officials tasked with establishing a “national playbook” of technical standards associated with biosecurity, traceability, and sampling/testing.

WHEREAS, There is a recognized risk of disease transmission from both feed ingredients and whole feed and research and risk assessments continue to be conducted to assess the risks associated with importing feed ingredients from ASF-CSF positive regions and potential mitigation strategies to reduce or eliminate those risks.

WHEREAS, US SHIP presents as a platform for incorporating broadly applicable standards of practice related to mitigating the risks of disease introduction via imported feedstuffs into a swine health certification program that is national in its scope and recognition.

WHEREAS, There has been significant efforts directed towards understanding the importation of feed ingredients used in the swine industry and biosecurity practices incorporated throughout the feed supply chain.

Now, therefore be it RESOLVED:

The US SHIP House of Delegates requests the continued pursuit of a demonstration project across a substantive subset of US SHIP pork industry participants and feed industry stakeholders.

Specifically, within this continued demonstration project efforts should be directed towards increasing the breadth of representation and engagement including further discussions with producer, feed/premix manufacturer, ingredient supplier, the American Feed Industry Association (AFIA) and the exhibition swine industry.

Participants in the project would evaluate and report aspects of their import practices for non-bulk ingredients, defined as ingredients packaged in 1 metric ton packaging or less originating from or undergoing transit through a region with a known presence of African swine fever virus (ASFV) and/or Classical swine fever virus (CSFV).

The reporting should include aspects regarding:

1. Traceability
2. Biosecurity at origin
3. Biosecurity upon arrival in the United States
4. Requirements of quarantine facility and processes

Intended Outcomes:

At the conclusion of this pilot program, information will be summarized and presented to the US SHIP House of Delegates characterizing the current feed biosecurity practices being implemented by the US swine industry for import of non-bulk ingredients from ASF/CSF affected countries.

Based on these learnings through this pilot program, a framework of a national Biosecure Ingredient Imports program may be proposed for consideration and deliberation by the US SHIP House of Delegates.

RESOLUTION NUMBER: 2024 – 3
SUBMITTED BY: US SHIP Site Biosecurity Feral Swine Mitigation Working Group
SUBJECT MATTER: US SHIP Secure Pork Supply Plan Working Group Recommendations

WHEREAS, Secure Pork Supply Enhanced Site Biosecurity Plans are required for the commercial scale US SHIP Production Site Types to achieve and maintain the US SHIP ASF/CSF Monitored certification.

WHEREAS, The Secure Pork Supply Plan Site Biosecurity Plan for Pigs with Outdoor Access was determined to be the proper mechanism for producers with outdoor production to document their mitigation activities to limit the biosecurity threat due to contact with feral swine.

WHEREAS, US SHIP Site Biosecurity and Feral Swine Mitigation Working Group was tasked with working with the National Pork Board (NPB) Secure Pork Supply Working Group to advise revisions within Secure Pork Supply’s resources to include the incorporation of a feral swine mitigation plan for swine with outdoor access.

WHEREAS, The US SHIP Site Biosecurity and Feral Swine Mitigation Working Group, consisting of producers, academics, industry and regulatory representatives, have developed a list of potential recommendations for the NPB Secure Pork Supply Working Group to consider during their upcoming revision of the Secure Pork Supply Plan.

WHEREAS, US SHIP site biosecurity standards and recommendations must stay aligned with future revisions of the Secure Pork Supply Site Biosecurity Plans to ensure seamless execution of existing standards and the development of future standards.

WHEREAS, The most functional way to ensure the seamless transition is to ensure there is adequate representation of active members of the US SHIP Site Biosecurity Working Groups on the Secure Pork Supply Working Group.

Now, therefore be it RESOLVED:

The US SHIP House of Delegates requests the National Pork Board’s Secure Pork Supply Working Group to work with US SHIP leadership to ensure that any future revisions to the Secure Pork Supply Plans fit the needs of US SHIP Site Biosecurity now and in the future.

RESOLUTION NUMBER: 2024 – 4

SUBMITTED BY: US SHIP Traceability Work Group

SUBJECT MATTER: Extend the US Swine Health Improvement Plan (US SHIP), traceability pilot to support a national swine traceability approach by using and further developing “US SHIP Compliant Repositories of Inter-Premises Swine Movement Records” for capturing movement records of swine being moved interstate for further growing, breeding, or exhibition in near real-time across a number of US States.

WHEREAS, The US SHIP is an industry, state, and federal partnership that centers on establishing a national program for safeguarding, certifying, and bettering the health of US swine and the competitiveness of the US pork industry.

WHEREAS, The ability to proficiently track and trace inter-premises movements of live swine across the breadth of US pork industry participants is a foundational element of foreign animal disease preparedness.

WHEREAS, A resolution establishing the need for national mandatory swine traceability was approved at the 2024 Pork Forum.

WHEREAS, The US SHIP Resolution 2023-1 charged the US SHIP Traceability Working Group and requested the initiation use of “US SHIP Compliant Repositories of Inter-Premises Swine Movement Records” for swine traceability purposes.

WHEREAS, A pilot project was conducted with the engagement of small, medium, and large pork producers, 14 State Animal Health Offices, and two animal movement repositories, i.e., AgView housed at National Pork Board and RABapp housed at North Carolina State University.

WHEREAS, The pilot has provided an opportunity for stakeholder engagement, the establishment of working relationships between engaged parties, gap identification and opportunity for correction, and general traceability improvements across engaged stakeholders.

WHEREAS, The pilot has identified that the establishment of “US SHIP Compliant Repositories of Inter-Premises Swine Movement Records” is feasible, albeit there is still a need for considerable advancements for complete animal movement data collection by producers and further development of build-for-purpose capacities for efficient and securely deliverable of animal movement data, making it readily available to State Animal Health Officials.

Now, therefore be it RESOLVED:

The US SHIP House of Delegates requests the continued pursuit of a demonstration project across a substantive subset of US SHIP pork industry participants, industry stakeholders, state animal health officials (SAHOs), and US SHIP official state agencies for using and further developing “US SHIP Compliant Repositories of Inter-Premises Swine Movement Records” for capturing movement records of swine being moved interstate for further growing, breeding, or exhibition in near real-time.

Specifically, within this continued demonstration project, efforts should be directed towards increasing the breadth of representation and engagement, including further discussions with program participants (Producers), State Animal Health Officials, US SHIP Official State Agencies, entities responsible for managing/providing services of “US SHIP Compliant Repositories of Inter-Premises Swine Movement Records”, and the individuals representing the databases applications being used.

Participants in the project would evaluate and report aspects towards using and further developing “US SHIP Compliant Repositories of Inter-Premises Swine Movement Records” towards supporting national swine traceability, with emphasis and focusing on improving data capture quality and promptly delivering such information in a user friendly format to the appropriate State Animal Health Official and US SHIP Official State Agency.

The swine traceability reporting should include aspects regarding traceability advancements from:

- Program participants (Producers)
- State Animal Health Officials
- Official State Agencies
- Entities responsible for managing/providing services of the Repository in this initiative
- Individuals representing the database applications used to support the services being provided

Intended Outcomes:

The continued traceability efforts would identify gaps, offer an opportunity for correction, and provide information that can support data-driven decisions to guide further the advancements toward national-scale traceability in the swine industry. Learnings from this pilot will be presented at the US SHIP House of Delegates and can be further used as a framework to support the advancement and implementation of a national swine traceability program.

RESOLUTION NUMBER: 2024 – 5

SUBMITTED BY: US SHIP Traceability Work Group

SUBJECT MATTER: Requesting subset of State Animal Health Officials (SAHO) to commission a working group to define and propose a path forward for enabling producers to utilize the services of US SHIP Compliant Repositories of Inter-Premises Movement Records to meet the swine movement record reporting requirements of Swine Production Health Plans (SPHP) or Certificates of Veterinary Inspection across a breadth of US states with significant pork production operations

WHEREAS, The US SHIP is an industry, state, and federal partnership that centers on establishing a national program for safeguarding, certifying, and bettering the health of US swine and the competitiveness of the US pork industry.

WHEREAS, The ability to proficiently track and trace inter-premises movements of live swine across the breadth of US pork industry participants is a foundational element of foreign animal disease preparedness.

WHEREAS, Movement records of swine being moved interstate for the purposes of further breeding, growing, or exhibition have long been required to be reported to the State Animal Health Official of the state of destination in accordance with Swine Production Health Plans (SPHPs) or Certificates of Veterinary Inspection (CVIs).

WHEREAS, The methods used, required fields, format, and the degree of sophistication in which such interstate movement records of swine are captured and archived are highly variable within and across US states. As such, these inter-premises movement records are commonly not well-suited to support highly scalable or proficient track and trace procedures.

WHEREAS, Enabling producers to utilize the services of capable US SHIP Compliant Repositories of Inter-Premises Swine Movement Records as a means to meet the swine movement record reporting requirements of Swine Production Health Plans (SPHPs) or Certificates of Veterinary Inspection (CVIs) would create a tangible and sustainable business use case for producers and states to adopt the use of the common standards and technologies that are needed to establish a truly capable national system of traceability across the US pork industry.

Now, therefore be it RESOLVED:

The US SHIP House of Delegates request a subset State Animal Health Officials from US SHIP participant states to commission a working group to define and propose a path forward for enabling producers to utilize the services provided by US SHIP Compliant Repositories of Inter-Premises Movement Records as acceptable means for producers to meet the swine movement record reporting requirements of Swine Production Health Plans (SPHPs) or Certificates of Veterinary Inspection (CVIs) across a breadth of US states with significant pork production operations.

Intended Outcomes:

Create a pathway forward for a tangible and sustainable business use case for producers and states to adopt the use of the common standards and technologies that are needed to establish a truly capable national system of traceability across the US pork industry.

RESOLUTION NUMBER: 2024 - 6

SUBMITTED BY: The American Association of Swine Veterinarians and the Delegation from the State of Minnesota.

SUBJECT MATTER: Explore the potential for PEDV certification in US SHIP.

WHEREAS, The US Swine Health Improvement Plan (US SHIP) is an industry, state, and federal partnership that centers on establishing a national program for safeguarding, certifying, and bettering the health of US swine and competitiveness of the US pork industry.

WHEREAS, The initial scope of US SHIP has been focused on establishing the ASF/CSF Monitored certification.

WHEREAS, The development of a platform for certifying the health of US swine being established in US SHIP could be leveraged to certify and mitigate the impact of any number of endemic diseases of high consequences to the US pork industry.

Now, therefore be it RESOLVED:

The US SHIP House of Delegates requests the US SHIP staff and stakeholders to work collaboratively with the PEDV centered working groups recently established by the American Association of Swine Veterinarians and the National Pork Board to evaluate the next steps and potential for introducing a PEDV health status certification within US SHIP to be considered by the 2025 US SHIP House of Delegates.

Clarification:

The ASF/CSF Monitored certification is the baseline and only required certification within US SHIP (similar to the Salmonella pullorum being the baseline certification in NPIP). Additional certifications for endemic diseases such as PEDV are envisioned to be optional and utilized by participants in an ala-carte fashion. Therefore, a participant currently certified as ASF/CSF Monitored would not be required to participate in a PEDV certification to remain certified as ASF/CSF Monitored.

RESOLUTION NUMBER: 2024 - 7

SUBMITTED BY: Delegation from the State of Indiana

SUBJECT MATTER: General Conference Committee (GCC)

WHEREAS, The GCC serves an important role in representing the interests of swine producers, livestock marketing operations, and slaughter facilities as the advisory body to the US SHIP program administrators.

WHEREAS, US SHIP activities have such a strong connection to regulatory veterinary medicine that GCC members could benefit from the perspective of a State Animal Health Official.

Now, therefore be it RESOLVED:

The US SHIP House of Delegates supports a recommendation to USDA to include a non-voting GCC position for a State Animal Health Official on a rotating basis.

US SHIP General Conference Committee (GCC)

Summary Description (What is the US SHIP GCC?):

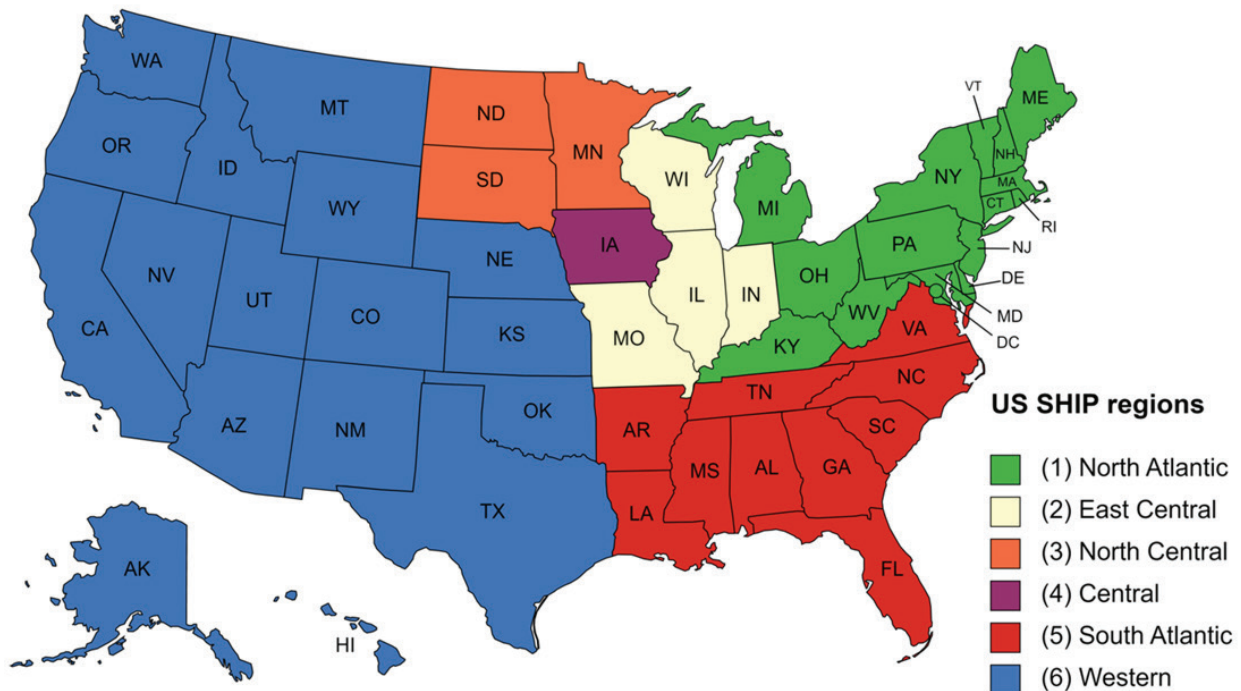
A federal advisory committee to USDA APHIS and the US Secretary of Agriculture on matters relating to swine health and the administration of US SHIP¹.

Note: The GCC members are to represent the points of view of all types of swine producers, livestock marketing operations, and slaughter facilities.

Composition of US SHIP GCC:

6 Regional members and 3 At-large members.

- Six Regional Members: (elected by delegates in said Region at US SHIP HOD)



- Three At-Large Members: (elected by the entire delegate body at US SHIP HOD)

- Packer/Slaughter Facility Member
- Exhibition Swine Member
- Unrestricted At-Large Member

Description of Purpose and Duties:

1. The purpose of the US SHIP General Conference Committee (GCC), representing cooperating state agencies and swine industry members, is to act as a liaison between the swine industry and the USDA/APHIS. The GCC maintains and ensures industry involvement and advises the Secretary of Agriculture on matters relating to swine health and administration of the US SHIP.
2. The duties of the US SHIP GCC members involve:
 - a) Assisting USDA/APHIS US SHIP staff in planning, organizing, and conducting the annual US SHIP House of Delegates (HOD) conference, and Between HOD conferences, the GCC represents the cooperating States in advising USDA/APHIS on administrative procedures and interpretations of US SHIP provisions, and
 - b) Advises and makes recommendations to USDA/APHIS on the relative importance of maintaining adequate departmental funding for US SHIP to enable the Senior Coordinator and staff to fully administer the provisions of the Plan, and
 - c) Assisting USDA/APHIS in evaluating comments received from interested persons concerning proposed amendments to the US SHIP provisions, and
 - d) Recommending to the Secretary of Agriculture any changes in US SHIP provisions when postponement until the next US SHIP HOD Conference would seriously impair the operation of the program, and
 - e) Serving as a forum for the study of problems relating to swine health.
3. GCC members will serve a 3-year term of service, with no limits to the number of terms served.

Each of the 6 regional members will be elected by their respective regions and at-large members will be elected by the entire US SHIP HOD voting delegation^{2,3,4}.

Footnotes:

¹The US SHIP GCC is enroute to be an officially recognized federal advisory committee upon the codification of US SHIP. The initial US SHIP GCC elections were held at the 2023 US SHIP House of Delegates Meeting in Bloomington, Minnesota.

² No more than two members of any standing General Conference Committee may be employed by or associated with the same business entity.

³ When there is a mid-term vacancy for a GCC position, the General Conference Committee shall make an interim appointment. The appointee shall serve until the next House of Delegates when an election is held. That election will be to fill the remaining term of the vacated position.

⁴In efforts to create an element of future continuity amongst the GCC members, the initially elected GCC members (that were elected at the 2023 US SHIP HOD) initial term of service is staggered as follows: Regions 3 & 4 and Exhibition (1 year term); Regions 1 & 2 (2 year term), Regions 5 & 6 (3 year term). Thus, elections for the GCC members representing Region 3, Region 4, and Exhibition Swine will be held at the 2024 US SHIP HOD.

GCC 2024 Nominees

Region 3 – North Central

States: MN, ND and SD



Craig Andersen,

Craig Andersen is the owner of Andersen Farm which includes a feeder to finish pork production enterprise marketing 6500 head annually. The farm also includes 1200 acres of crop production, including corn, soybeans, winter wheat, and alfalfa.

Craig's past leadership includes the South Dakota Pork

Producers Council, Past President of SDPPC, National Pork Leadership Institute, Turner County Pork Producers, serving on Lincoln Co Planning & Zoning Board, Centerville School Advisory Board, Delaware Township Board, and 6 years on the National Pork Producers Council Board.

Craig serves as a Trustee at Komstad Covenant Church and is a member of the Masonic Lodge. He also is on the Lincoln

County FSA County Committee.

Craig follows the WE CARE philosophy, doing his best every day in every way; he also defines success through his children, who want to continue the family's farming legacy with a diversified operation.

Craig and his wife, Gail, live in Centerville, South Dakota, along with their adult children Tyler, Jacob (wife Heather and children Henrik, Kirska, & Bo), and daughter Emily, who are all actively involved in the family's pork operation.

Reason for Running for the US SHIP GCC:

I would like to serve because while having been on the SDPPC and NPPC boards these past years, I've been informed of the devastation that ASF has done in Europe and Asia. We need to learn from mistakes and successes that were made. We need to utilize existing programs to minimize duplication of paperwork. We need some hands-on producers on the GCC to ensure that anything we make, standards, and requirements are practical to do at the farm level. I have been involved with SHIP since the beginning and am committed to seeing it through the process. I would rather be overprepared and not need it than be underprepared and have an FAD get into the USA.

Region 3 – North Central

States: MN, ND and SD



Michael Walker,

Michael Walker earned a BS in Agriculture Studies at Iowa State University.

In his 24-year career he has primarily been at Christensen Farms focused on production for the first 16 years while the last 8 years has been focused on Business Development.

Currently Michael serves on the Minnesota Emergency Disease Management Committee by supporting the Depopulation & Disposal, Permitting, and Regionalization Sub-committees since 2019.

Michael was elected to serve on the MN Pork Board in 2024 and has also had the opportunity to serve on multiple task forces with the National Pork Board.

Michael and his wife, Cassie, are always on the move with their 4 daughters ranging from 3 to 16 who are involved in hockey, softball, and gymnastics.

Michael and his family have lived in the small town of Belview, Minnesota for the last 8 years.

Reason for Running for the US SHIP GCC:

I am running for a seat on the US SHIP GCC because I believe in what the program has been able to accomplish and what the potential of the program holds. I believe that US SHIP represents our Industry's best opportunity to have a holistic approach to preventing a catastrophic event of ASF and CSF within the US.

This is the culmination of tremendous work that has been put in by all in the industry and government officials at the state and national levels. Prevention of these two diseases within the US is most important for all our stakeholders, from delegates representing the swine industry from their states to all within agriculture.

I firmly believe that we will succeed in our mission and that this work is the bedrock for business continuity for all of us. I am proud to have had the opportunity to serve as the Chair for the GCC over the past year and would ask to serve this industry as an elected steward of US SHIP again.

Region 4 – Central

State: IA



Ian Levis, DVM

Dr. Ian Levis is the Senior Operations Manager for Seaboard Foods and has been actively involved in pork production for 23 years. He grew up in Audubon, Iowa and completed his undergraduate work at Iowa State University and then earned his DVM degree from Iowa State University.

Dr. Levis has been involved in the Iowa Pork Producers Association’s Foreign Animal Disease Task Force and the Swine Health Committee. He has also been active in the National Pork Board’s Swine Disease Research Task Force and is an active member in American Association of Swine Veterinarians and the American Association of Veterinary Medicine.

Ian and his wife Brandi enjoy cooking, hunting and shooting

sports, numerous outdoor activities, and spending time with their pets and family.

Reason for Running for the US SHIP GCC:

I want to continue the monumental progress that has been made in a relatively short period of time. The success of US SHIP is of paramount importance to the entire pork industry given the global disease pressures we face.

In the future I hope US SHIP continues to grow in enrollment and participation while continuing to build upon the framework that has been successfully completed in the last few years.

I want to use my years of experience and knowledge in the pork industry to assist US SHIP moving forward.

At – Large: Exhibition Swine Member



Jesse Heimer,

Jesse Heimer, Taylor, Mo., owns and operates Heimer Hampshires, a nationally renowned show pig operation where more than 600 purebred and crossbred litters are farrowed annually and marketed coast to coast.

A third generation pig farmer, Jesse is committed to developing the best genetics in the industry while keeping high standards for herd health and biosecurity. His focus and commitment has resulted in numerous champions for customers at every level of competition as well as a genetic influence that has impacted the entire industry.

The mission of Heimer Hampshires is rooted in Jesse's passion

to develop young people and promote agriculture as a viable and sustainable career path. He has long been a leading advocate of junior livestock programs and finds purpose in supporting his own kids, among many others, across the United States in their efforts to raise and show pigs as a means of developing valuable life skills.

Jesse serves on the Missouri Pork Producers Association Board of Directors, completed a term in the Pork Leadership Institute and recently was a producer representative on the NPB/NPPC trip to Europe to learn about ASF. Outside of the pork industry, he enjoys spending time on the farm with his wife, Amy, and two kids, Max and Harper. Both kids are active in multiple sports and usually, they can all be found at a ball field, gym, or a pig show.

Reason for Running for the US SHIP GCC:

Healthy pigs are the foundation of success for everyone in the swine industry, and as I represent my fellow show pig producers, I look forward to working with others to develop plans for biosecurity, traceability, and preparedness in a manner that allows everyone in the pork industry to succeed.

US SHIP Classifications, Delegate Allocation, and Governance

I. US SHIP Classifications (6 groupings, for delegate allocation)

1. Breeding Herd: Sites: $\geq 1,000$ breeding females or ≥ 50 mature boars (Inventory)
2. Growing Pig: Sites: $\geq 1,000$ post-weaned pigs (Inventory)
3. Slaughter Facility: Slaughter $\geq 100,000$ pigs / year
4. Small Holdings: Farm sites with ≥ 100 post-weaned pigs (Inventory) that don't fit into any of the other commercial farm site categories. USDA or State Inspected slaughter facilities slaughtering $< 100,000$ pigs / year
5. Non-commercial: Production sites with ≤ 100 pigs. (e.g., exhibition, niche)
6. Live Animal Marketing Operations: Sites that aggregate swine for resale of such swine (> 100 pigs/week) onto slaughter facilities.

Notes:

¹ Farrow-to-Finish or Farrow-to-Feeder sites $\geq 1,000$ breeding females will be classified as Breeding Herds.

² Farrow-to-Finish or Farrow-to-Feeder sites $< 1,000$ breeding females will be classified as Small Holdings.

³ Boar Stud sites (> 50 mature/working boars) will be classified as Breeding Herds for delegate allocation purposes.

US SHIP Classifications are important as it relates to ensuring appropriate representation from the various segments of US pork industry and in the delegate allocation process.

Such US SHIP Classifications (and associated definitions) also create clarity for the states as to “who to ask” when seeking industry stakeholder volunteers to serve as delegates in representing the interests of a particular “Classification or Segment” of the industry in the US SHIP House of Delegates.

However, there will not be any “Classification Specific” votes cast at the US SHIP House of Delegates Meeting to be held on September 3 - 5, 2024 in Bloomington, MN.

II. Overview of US SHIP Delegate Allocation

Formula based approach = (Base Allocation & Distribution of At Large Delegates)

Brief Description of Methodology Used For Delegate Allocation:

This formula-based approach uses a combination of a baseline allocation of delegates to all participating states, as well as the generation and subsequent distribution of a pool of At-Large Breeding Herd and Growing Pig delegates based upon the percentage of Breeding Swine and Growing Pigs (respectively) participating in US SHIP that are located in the state.

The formula-based approach is structured such that the number of At-Large delegates increase in direct proportion to the number of states participating in the US SHIP.

Detailed Description with Explanation:

1. Participating states will be allotted a minimum base of 4 voting delegates, one delegate (vote) for each of the following 4 US SHIP Classifications: Non-commercial, Small Commercial, Breeding Herd, and Growing Pig. A state will receive 1 additional voting delegate for the classification slaughter if they have an active slaughter facility operating in their state, for a total of 5 voting delegates.
 2. A pool of At-large delegates will be generated for allocation to the states. Two At-large delegates (1 Breeding Herd delegate and 1 Growing Pig delegate) will be generated for each state participating in the US SHIP House of Delegates.
- For example:
- a. If 25 states participate, a pool of 25 Breeding Herd and 25 Growing Pig At-Large delegates (votes) will be generated for allocation.
3. The pool of At-large delegates will be allocated to states as a percentage of all Breeding Swine and Growing Pigs (respectively) ***enrolled*** in US SHIP that are located in a given state.

For example:

- a. Using example above of 25 participating states: If a state had 4% of the Breeding Swine inventory and 8% of the Growing Pig inventory ***enrolled*** among participating states, they would be allocated 1 additional Breeding Herd delegate and 2 additional Growing Pig delegates.

4. Live Animal Marketing Operation delegates: The 15 states that generate the most Breeding and Growing Pig at large delegates (combined) will each have one Live Animal Marketing Operation delegate allocated to their respective state's delegation. The Live Animal Marketing Operation delegate is an additional delegate invitation being extended to the 15 states that generate the most Breeding and Growing Pig at large delegates (combined).

Note: Since US SHIP currently in the start-up phase, the number of Breeding Swine and Growing Pigs enrolled (versus certified) at the end of June 2024 is being used to allocate the Breeding Herd and Growing Pig At-Large Delegates (respectively) for the 4th US SHIP House of Delegates meeting.

III. Delegate Allocation for 2024 US SHIP HOD (Enrollment as of 7/15/2024)

36 states have demonstrated interest in US SHIP

State	Non-commercial	Small commercial	Breeding herd	Growing	Slaughter	Live Marketing	Total
Alabama	1	1	1	1	0	0	4
Arizona	1	1	1	1	0	0	4
Arkansas	1	1	1	1	0	0	4
California	1	1	1	1	0	0	4
Colorado	1	1	2	1	0	1	6
Delaware	1	1	1	1	0	0	4
Florida	1	1	1	1	0	0	4
Georgia	1	1	1	1	0	0	4
Hawaii	1	1	1	1	0	0	4
Illinois	1	1	4	3	1	1	11
Indiana	1	1	3	3	1	1	10
Iowa	1	1	6	13	1	1	23
Kansas	1	1	2	2	1	1	8
Kentucky	1	1	2	1	1	0	6
Louisiana	1	1	1	1	0	0	4
Michigan	1	1	2	2	1	1	8
Minnesota	1	1	4	5	1	1	13
Mississippi	1	1	1	1	0	0	4
Missouri	1	1	3	3	1	1	10
Montana	1	1	1	1	0	0	4
Nebraska	1	1	3	2	1	1	9
North Carolina	1	1	7	7	1	1	18
North Dakota	1	1	1	1	0	0	4
Ohio	1	1	3	2	1	1	9
Oklahoma	1	1	4	2	1	1	10
Oregon	1	1	1	1	1	0	5
Pennsylvania	1	1	1	2	1	1	7
South Carolina	1	1	1	1	0	0	4
South Dakota	1	1	3	2	1	1	9
Tennessee	1	1	1	1	1	0	5
Texas	1	1	2	2	1	1	8
Utah	1	1	1	1	0	0	4
Virginia	1	1	1	1	1	0	5
West Virginia	1	1	1	1	0	0	4
Wisconsin	1	1	1	1	1	0	5
Wyoming	1	1	1	1	0	0	4
Total	36	36	71	72	19	15	249

IV. Other US SHIP Governance Items

1. Voting delegates representing each participating state will be appointed by each participating state's pork producer association. If a participating state does not have an active pork producer association, delegate selection will be deferred to the respective State Animal Health Official or Department of Agriculture.
2. The State Animal Health Official or their designee is to serve as one of the voting delegates among their respective state's delegation at the US SHIP House of Delegates.
 - This is not an additional delegate and does not have any implication on the number of delegates being allocated for use by participating states.
 - This language is included simply to clarify the importance of the SAHO's (and/or respective State Department of Agriculture's or Board of Animal Health's) role and engagement with this US SHIP development project in their respective state.
 - The SAHO's or their designee's engagement in US SHIP and the US SHIP House of Delegates process is highly important.
3. Delegates must be present to vote at the US SHIP House of Delegates.
4. Individual delegates attending the US SHIP House of Delegates cannot cast more than one vote or cast votes on other delegates' behalf (i.e., one person/delegate = one vote).
5. States are not required to have representation or be present at the US SHIP House of Delegates to participate in the US SHIP.
6. Definitions of US SHIP Program Standards vs Resolutions:
 - US SHIP Program Standard = Requirements to be met or exceeded by program participants to be certified in US SHIP.
 - US SHIP Resolution = Charges to pursue initiatives or further explore specific issues that aim to further inform US SHIP program content and direction.
7. Approval of new or amendments to existing Program Standards require a super-majority (> 2/3) of votes cast.
8. Approval of Resolutions require simple majority (> 1/2) of votes cast.
9. Amendments to both Standards and Resolutions can be brought forth as long as such amendment remains within the scope under consideration.
10. Motions for new Standards or Resolutions which have not been vetted and previously circulated to delegates will not be considered for vote but instead tabled for further review and consideration.

US SHIP HOD Business Meeting Procedures

Section 1 - Rules

1. The delegate meeting will be conducted pursuant to these Standing Rules, and Roberts Rules of Order (in that order).
2. The Standing Rules and Roberts Rules of Order may be altered by a motion to suspend the rules, which requires a two-thirds vote.

Section 2 – Credentials

1. All voting delegates on the delegate floor must be registered with US Swine Health Improvement Plan.
2. Identification badges issued at the time of registration must be worn for admission to the delegate floor and may not be transferred among individuals.
3. Designated seating by participating state will be provided for both voting and non-voting delegates with additional seating available for invited guests.
4. A report of the total number of voting delegates present will be shared by the Chair along with the required number of affirmative votes to approve a motion.

Section 3 – Debate

1. Only voting delegates can introduce a motion and provide a 2nd.
2. In recognizing speakers, the Chair will give preference to (a) delegates who have not previously spoken on the substantive issue being debated (b) delegates; and (c) others.
3. Each speaker should identify themselves by citing their name, organization, and state they represent prior to addressing the delegate body.
4. Each speaker will be limited to two minutes. The Chair may limit debate further to accommodate as many speakers as possible and allow for more business to be considered.

Section 4 – Voting

1. Voting will be in person by delegates only.
2. Amendments to vetted motions (standards and resolutions) will be entertained in written format.
3. New motions not previously vetted will be tabled for further consideration.
4. Each registered voting delegate will receive a voting paddle to be used when voting.
5. The Chair will specify the manner in which votes will be taken.
6. The Chair can appoint tellers to assist in counting the votes.

US SHIP House of Delegates 2023 Meeting Minutes

September 7, 2023

The meeting was called to order by Tyler Holck at 8:00 a.m.

Janemarie Hennebelle moved to approve the agenda for the House of Delegates meeting. The motion to approve the agenda was seconded by Rich Deaton. Motion carried.

Peter Schneider moved to approve the minutes from the 2022 US SHIP House of Delegates Meeting held September 8, 2022, in Bloomington, Minnesota. The motion to approve the minutes was seconded by Mike Walker. Motion carried.

Voting delegates filled out ballots for the General Conference Committee Members with results to be announced at the end of the meeting.

Packer and Live Animal Marketing

Bret Marsh gave an update on the breakout session held September 6, 2023. No standards or resolutions were proposed by this committee and the report was limited to an update on the breakout session only. An important clarification for enrollment and certification of the packing plants and Live Animal Marketing Operations was made during the break-out section.

To be enrolled in US SHIP, packing plants need to provide site demographic information, fill out the biosecurity survey, and provide acknowledgment of participant understanding & compliance with the program.

For a packing plant to be certified, it must demonstrate competency in providing at least 30 days of movement information electronically in a common format (e.g., a prescribed CSV file) to the US SHIP Official State Agency in a timely manner (e.g., < 72 hours). Additionally, packing plants must comply with Program Standards requiring that permissioned individuals who have recently been exposed to livestock, feral/wild pigs or slaughter facilities in ASF/CSF/FMD positive regions or countries abroad only visit farms or slaughter facilities in the US after observing a 5-day downtime since arriving in the US, and donning PPE (boots/coveralls, etc.) provided by farm site or slaughter facility being visited.

Enrollment and certification requirements for Live Animal Marketing Operations are the same as for packing plants, with the additional need to comply with feed biosafety Program Standards.

Feed Biosecurity

Jordan Gebhardt gave an update on the breakout session held September 6, 2023. No standards or resolutions were proposed by this committee and the report was limited to an update on the breakout session only.

Live Haul Sanitation

Edison Magalhaes gave an update on the breakout session held September 6, 2023. No standards or resolutions were proposed by this committee and the report was limited to an update on the breakout session only.

Governance

Mike Walker provided an update on the breakout session held September 6, 2023.

Approved Standard 2023-1:

Standard 2023-1 was introduced by Mike Walker. Dwain Guggenbiller moved to approve the standard. The motion was seconded by Peter Schneider. Motion carried.

Approved Standard 2023-2:

Standard 2023-2 was introduced by Mike Walker. Tiffany Lee moved to approve the standard. The motion was seconded by Peter Schneider. Motion carried.

Approved Resolution 2023-5:

Standard 2023-5 was introduced by Mike Walker. Peter Schneider moved to approve the standard. Sarah Beachy seconded the motion. Sarah Beachy moved to amend the standard due to some states potential inability to comply based on state statute or rules. The amendment was seconded by Amanda Price. Amendment failed.

Joel Nerem moved to amend the standard by making it a resolution. Seconded by Mike Martin. Amendment passed.

Motion to approve standard as amended to change to a resolution carried.

Approved Resolution 2023-2:

Resolution 2023-2 was introduced by Mike Walker. Dwain Guggenbiller moved to approve the resolution. The motion was seconded by Peter Schneider. Motion carried.

Sampling and Testing

Mike Paustian gave an update on the breakout session held September 6, 2023.

Approved Standard 2023-6:

Standard 2023-6 was introduced by Mike Paustian. Paul Yeske moved to approve the standard. The motion was seconded by Peter Schneider. Motion carried.

Approved Resolution 2023-4:

Resolution 2023-4 was introduced by Mike Paustian. Tiffany Lee moved to approve the resolution. The motion was seconded by Peter Schneider. Bret Marsh requested a friendly amendment to use consistent wording of the word “retrieve” in the table and resolution which was approved by Mike Paustian. Motion carried.

Traceability

Daniel Boykin gave an update on the breakout session held September 6, 2023.

Approved Standard 2023-3:

Standard 2023-3 was introduced by Daniel Boykin. Peter Schneider moved to approve the standard. The motion was seconded by Mike Walker. Motion carried.

Approved Standard 2023-4:

Standard 2023-4 was introduced by Daniel Boykin. Rich Deaton moved to approve the standard. The motion was seconded by Peter Schneider. Motion carried.

Approved Resolution 2023-1:

Resolution 2023-1 was introduced by Daniel Boykin. Daniel Hendrickson moved to approve the resolution. The motion was seconded by Joel Nerem.

Joel Nerem moved to amend the resolution to allow for additional repositories. The motion to amend was seconded by Al Wulfekuhle. Amendment passed.

Motion to approve resolution as amended carried.

Site Biosecurity

Chris Rademacher gave an update on the breakout session held September 6, 2023.

Approved Resolution 2023-3:

Resolution 2023-3 was introduced by Chris Rademacher. Peter Schneider moved to approve the resolution. The motion was seconded by Tiffany Lee. Motion carried.

Election Results were announced for General Conference Committee Members with the following individuals being elected:

Term (years)	Position	Name
1	Region 3	Mike Walker
1	Region 4	Mike Paustian
1	Exhibition	Jesse Heimer
2	Region 1	Don Davidson
2	Region 2	AV Roth
2	Packer	Katie Stack
3	Region 5	Mary Battrell
3	Region 6	Christine Mainquist-Whigham
3	At-large	Ryan Pudenz

Tiffany Lee moved to adjourn the meeting and it was seconded by Jeff Kaisand. Motion carried. Meeting was adjourned at 10:12.

The Standards and Resolutions passed at the 2023 US SHIP HOD are available on the US SHIP website under Documents (usswinehealthimprovementplan.com).

US SHIP GCC Executive Summary

The US SHIP General Conference Committee (GCC) includes nine members representing the six districts and three at-large positions who were elected by producers at the 2023 US SHIP HOD meeting. The GCC met virtually with the SHIP pilot team every month and gathered for two in-person meetings over the last year. Key deliverables, meeting outcomes, and activities from the year are captured below.

December GCC Meeting Recap: The GCC met in person on December 18th and 19th, 2023, in Ames, Iowa. Also in attendance were members of the USDA, including Veterinary Services Associate Deputy Administrator Dr. Koren Custer, Veterinary Services Commodity Health Center Director Dr. Lisa Rochette, Dr. Dustin Oedekoven of the National Pork Board (NPB), and the US SHIP staff.

The key deliverables from the meeting were:

- Established HOD bylaws including timelines for standard and resolution proposals (>100 days prior to HOD) and distribution of HOD proceedings for state reviews (>45 days prior to HOD)
- Discussed desired skills sets, industry experience, and location for permanent Senior Coordinator position and staff to assist industry in its recruiting efforts for USDA's hiring process
- Supported continued work in the areas of biosecurity, traceability, and surveillance, as well as identified a plan for GCC review of Program Standards as they are transitioned to a standardized USDA format to ensure intent is maintained
- Unanimously supported future expansion of US SHIP to include domestic disease classifications
- Discussed the inclusion of Florida and Louisiana in US SHIP due to feral pig populations

December GCC Meeting Recap: The GCC met in person on June 7th, 2024, in Des Moines, Iowa. Additional meeting participants included Dr. Lisa Rochette and the US SHIP staff.

The key activities from the meeting included:

- Reviewed proposed Standards and Resolutions for 2024 HOD meeting
- Reviewed mock delegate allocation for the 2024 HOD meeting, based upon May enrollment data, and discussed potential delegate allocation strategies for 2025 HOD meeting
- Approved the draft agenda for the 2024 HOD meeting
- Reviewed key topics for the program's transition to USDA, based on an industry alignment meeting held with NPB, National Pork Producers Council (NPPC), and a subgroup of the GCC on June 6th. Specifically, the GCC discussed:
 - NPB's outreach and engagement with the program
 - NPPC's lobbying on behalf of program
 - USDA's plan for rulemaking and Program Standards development
- Reviewed and discussed the OSA guidance document, support plan, and funding for 2024

- Reviewed and discussed the 2024 Traceability Pilot summary and next steps
- Reviewed monthly updates provided to OSAs

Additional Activities:

- GCC member Mary Battrell attended the NPIP Stakeholder Meeting at the International Production and Processing Expo (IPPE) and visited the Georgia Poultry Lab Network and USDA NPIP Office
- GCC Chair Mike Walker and GCC Vice Chair Ryan Pudenz participated in regular engagement calls between USDA, NPPC, and US SHIP Staff
- GCC member Katie Stack was heavily engaged in the Traceability Working Group and traceability pilot activities
- Mary Battrell contributed on the AASV PEDV Elimination Task Force
- Ryan Pudenz worked closely with the SHIP Site Status Verification Database (SSVD) development and its utilization and application for packers
- GCC members met with the US SHIP Working Group leaders to discuss updates and progress
- Current GCC members worked to actively recruit candidates for new GCC members

Progress Toward Implementation of the US SHIP Site Status Verification Database

Giovani Trevisan, Leticia Linhares, Lydia Carpenter, Tyler Holck, Rodger Main

The US SHIP Site Status Verification Database is a built-for-purpose database application that provides a simple means for maintaining the current and officially recognized status of the US SHIP certifications held by the participating sites from across the US.

At the 2023 US SHIP House of Delegates (HOD), a resolution was approved with the subject matter “The US SHIP Site Status Verification Database.” The resolution evolved from a streamlined action item (program development need) discussed at the 2022 US SHIP HOD, whereas a collaborative effort was established between US SHIP and US SHIP OSAs to develop the US SHIP Site Status Verification Database. Specifics of the US SHIP Site Status Database conceptualization can be found in Appendix A, reprinted from the 2023 US SHIP proceedings booklet.

During spring 2023, the US SHIP Site Status Verification Database was initially deployed, and in the process of being on-boarded for use on a State-by-State basis, it was identified that not all OSAs were able to report participant sites to the US SHIP Site Status Verification Database. The US SHIP HOD considered the US SHIP Site Status Verification Database as an important evolution within US SHIP to provide transparency for the destination locations to know the ASF and CSF status prior to shipment of the livestock.

The US SHIP HOD resolution 2023-5 requested to explore alternative approaches of how US SHIP OSAs could report the status of participating premises in the states that have a state-based statute that was not allowing them to report such information to a third-party database application.

Basic US SHIP Operations

Participating premises are to be enrolled with the US SHIP Official State Agencies (US SHIP OSAs) in the state where the premises are located.

Upon enrollment, US SHIP participants provide site demographic information to the US SHIP OSA and fill out one biosecurity survey for all enrolled sites. Once participant’s sites demonstrate compliance with the program standards of the certification being pursued, the sites are then conferred the certification by the US SHIP OSA. The US SHIP Site Status Verification Database can receive the reporting by OSAs of sites enrolled or certified in the US SHIP.

Encountered Solutions

US SHIP participant OSAs and US SHIP Administration have worked as a team towards identifying solutions for providing a path to allow US SHIP participant OSAs to report US SHIP participant sites by different OSAs. Progress towards reporting US SHIP participant sites can be found in Figure 1.

The two encountered alternative solutions currently being used by US SHIP OSAs are:

- a. Establish a “Data Sharing and Confidentiality Agreement” between the participant US SHIP OSA and the Iowa State University, where the US SHIP Site Status Verification Database is housed.
 - Such legal agreements have been established and are in use by the Iowa US SHIP OSA
- b. Add a check box on the US SHIP enrollment forms where the US SHIP participants (Producers, Slaughter Facilities, and Live Marketing Operators) can check that box, giving permission to the respective OSA to report their participant sites.
 - Producer check boxes have been added to enrollment forms and are in use by Arizona, Kansas, Minnesota, North Carolina, North Dakota, and South Dakota US SHIP OSAs
 - Based on the US SHIP OSA’s feedback, a suggested language was also added to the US SHIP enrollment template forms available at the US SHIP website: *“As a US SHIP participant, I hereby grant permission for the US SHIP OSA to share the PIN(s) and Status of US SHIP Health Status Certifications for the premises of which I have enrolled to the US SHIP Site Status Verification Database.”*

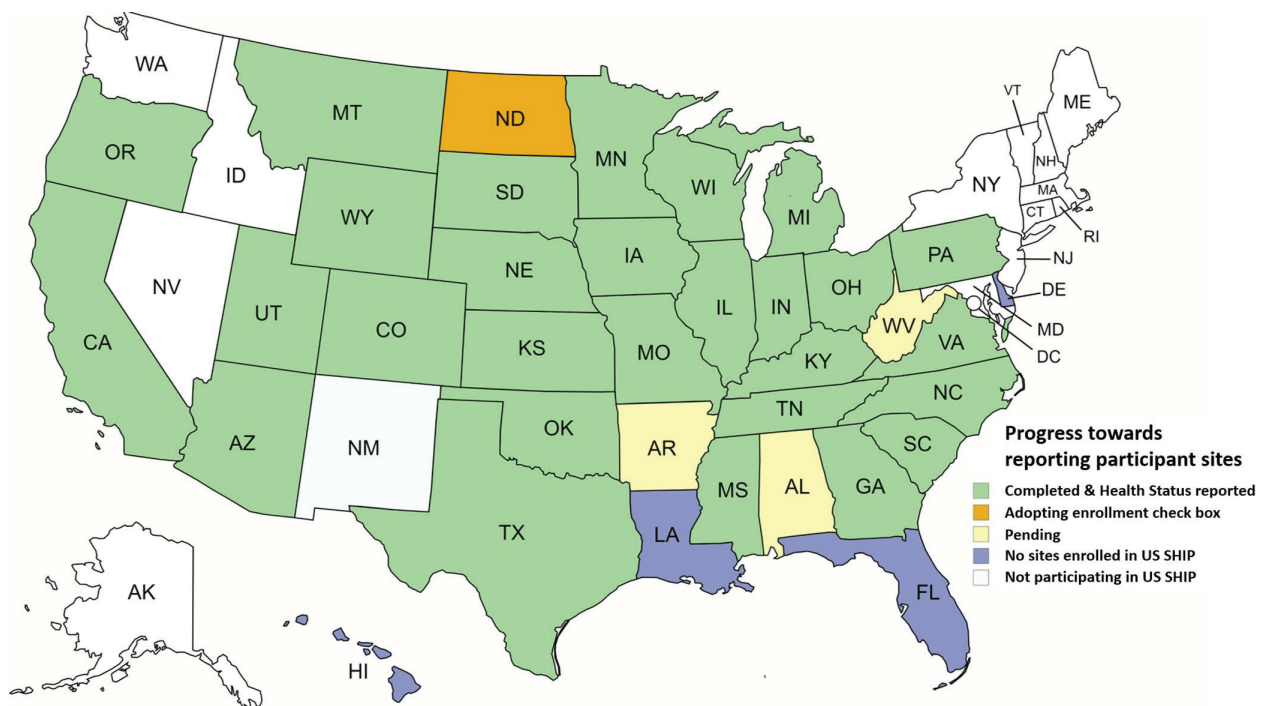


Figure 1: US SHIP Participant States and progress towards reporting participant sites to the US SHIP Site Status Verification Database.

Encountered solutions have been able to find alternative pathways for reporting US SHIP participant sites to the US SHIP Site Status Verification Database by the US SHIP OSAs. Based on this progress, the US SHIP General Conference Committee is proposing a new standard at the 2024 US SHIP HOD asking for *“US SHIP Official State Agencies (US SHIP OSA) requirement to report and keep the status of the US SHIP certifications held by the participating sites current in the US SHIP Site Status Verification Database.”*

Appendix A

US SHIP Site Status Verification Database

The US SHIP Site Status Verification Database is a built-for-purpose database application that provides a simple means for maintaining the current and officially recognized status of the US SHIP certifications held by the participating sites from across the US. It is envisioned that the US SHIP OSA will maintain and report the current status of the participant sites to the US SHIP Site Status Verification Database. Only a minimum set of data fields, including the premises identification number (PIN), corresponding US SHIP disease status, and the State where the premises are located, are to be reported by the US SHIP OSAs to the US SHIP Site Status Verification Database. All of the more detailed participant and premises level-specific identifiers (e.g., names, addresses, locations, etc.) remain with the respective US SHIP OSA and are not reported to or contained in the US SHIP Site Status Verification Database (**Figure 2**).

US SHIP Site Status Verification Database Application

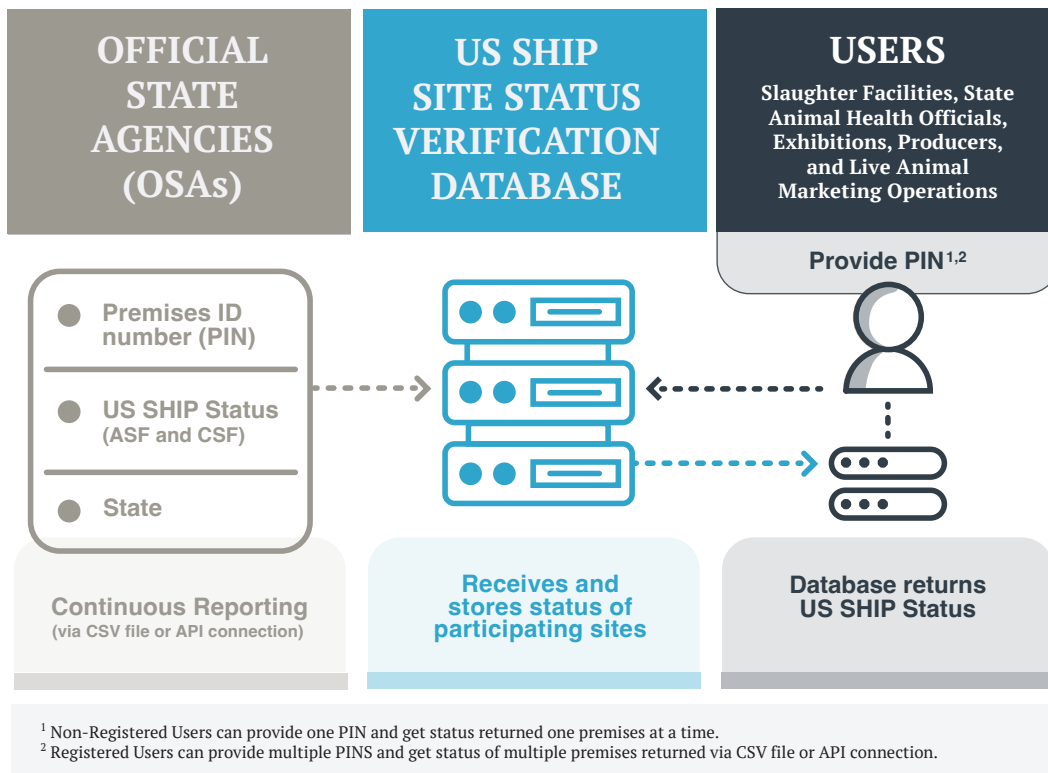


Figure 2: The basic workings and use of the US SHIP Site Status Verification Database

End users and use cases of the US SHIP Site Status Verification Database include but are not limited to:

- State Animal Health Officials can use to verify the status of the US SHIP certifications held by premises moving pigs into their state for further breeding, growing, or exhibition.
- Slaughter facilities can use to verify the status of the US SHIP certifications held by the premises supplying pigs to their facility to be harvested.
- Exhibitions can use to verify the status of the US SHIP certifications held by the premises pigs being exhibited/shown.
- Live animal marketing operations channels can use to verify the status of the US SHIP certifications held by the premises supplying pigs to their facility.
- Producers can use to verify the status of the US SHIP certifications held by either their own premises or the premises of pigs of which they are purchasing or otherwise receiving pigs from third parties.

US SHIP Disease Status

Once a site participates in the US SHIP, certification can be assigned as one of the three proposed disease statuses. The US SHIP disease status was structured to accommodate the different stages and levels of certification of participant sites using three proposed and the site Disease Status:

1. Monitored Free:

- To be used for ASF or CSF US SHIP certified sites

2. Certification Expired:

- On cases when the ASF or CSF-free certification is on hold for not complying with current program standards. It could affect either ASF, CSF, or both.

Example of situations where “Certification Expired” would occur is when the US SHIP House of Delegates approves new standards and the site no longer meet the US SHIP program standards.

3. Inactive:

- For US SHIP enrolled sites but not certified
- Certified sites when the site is going through a change in ownership and waiting for re-statement of certification by the OSA.
- Lost or revoked status (tested positive for ASF or CSF)
- Sites that decide to drop out of US SHIP
- Sites that never participated in US SHIP
- Sites that participated in the US SHIP and went Out of Business

Key point of the functionality of the US SHIP Site Status Verification Database application for end users

End users query the database via providing the PIN of the premises in question, and the database application simply returns the current status of the US SHIP certifications held by the premises (PIN) in question (**Figure 2**). The US SHIP Site Status Verification Database application is a built for purpose database application that is readily compatible with, and independent of, whatever software/database application or other means the US SHIP OSAs from across the country are using to house the participant/premises specific information and manage the workings of the US SHIP OSA in their respective state.

The US SHIP OSAs are the only entities permitted to report the status of the US SHIP certifications held by the participants in their respective state to the US SHIP Site Status Verification Database. The US SHIP Program Administration is responsible for managing the services provided by the US SHIP Site Status Verification Database.

The US SHIP Site Status Verification Database is currently being housed and maintained within the information technology infrastructure used to support the Department of Veterinary Diagnostic and Production Animal Medicine at the Iowa State University College of Veterinary Medicine.

Traceability Participant Summary

Highlights US SHIP Traceability Pilot further developing the US SHIP Compliant Repositories of Inter-Premises Swine Movement Records

Giovani Trevisan, Daniel Boykin, Katherine Stack, Tyler Holck, Rodger Main, Leticia Linhares

At the 2023 US SHIP House of Delegates, the Resolution 2023 – 1 with a subject matter utilization of a “*US SHIP Compliant Repository of Inter-Premises Swine Movement Records*” for *Capturing Movement Records of Swine Being Moved Interstate for Further Growing, Breeding, or Exhibition in Near Real-Time Across a Number of US States*” was approved by the delegate body. To address the resolution, a focused demonstration project was conducted to elucidate the potential of and barriers to a comprehensive system of traceability for US SHIP participants. The pilot project aimed to promote the development and implementation of functional and trusted systems for reporting inter-premises movements of swine to a US SHIP-compliant repository within seven days of animal movement (Figure 1). The following is a summary of the work conducted and the outcomes of the 2024 traceability pilot project.

The traceability pilot project stakeholders by groups and responsibilities:

- a. US SHIP participant producers and slaughter facilities:
 - Collected and reported animal movement data to a compliant repository(ies);
- b. Entities providing repository of interpremises swine movement record services:
 - The repository(ies) received and validated the quality of data received, securely house, and be the entity responsible for maintaining and operating the functionalities of the repository;
- c. Users included State Animal Health Officials (SAHOs) and US SHIP Official State Agencies (US SHIP OSAs).
 - SAHOs received swine movement records of animals moved into or out of their states for further growing, breeding, or exhibition. Such movements usually occur under a Swine Production Health Plan (SPHP) or Certificate of Veterinary Inspection (CVI).
 - US SHIP OSAs: received swine movement records of the loads of pigs received and shipped from participant slaughter facilities.

A Model For Proficiently Capturing and Securing Inter-Premises Swine Movement Records in Near Real-Time

*“A Potential Pathway to 21st Century Traceability across US Pork Industry”
 “Capable of Providing for a True Step Change in FAD Preparedness”*

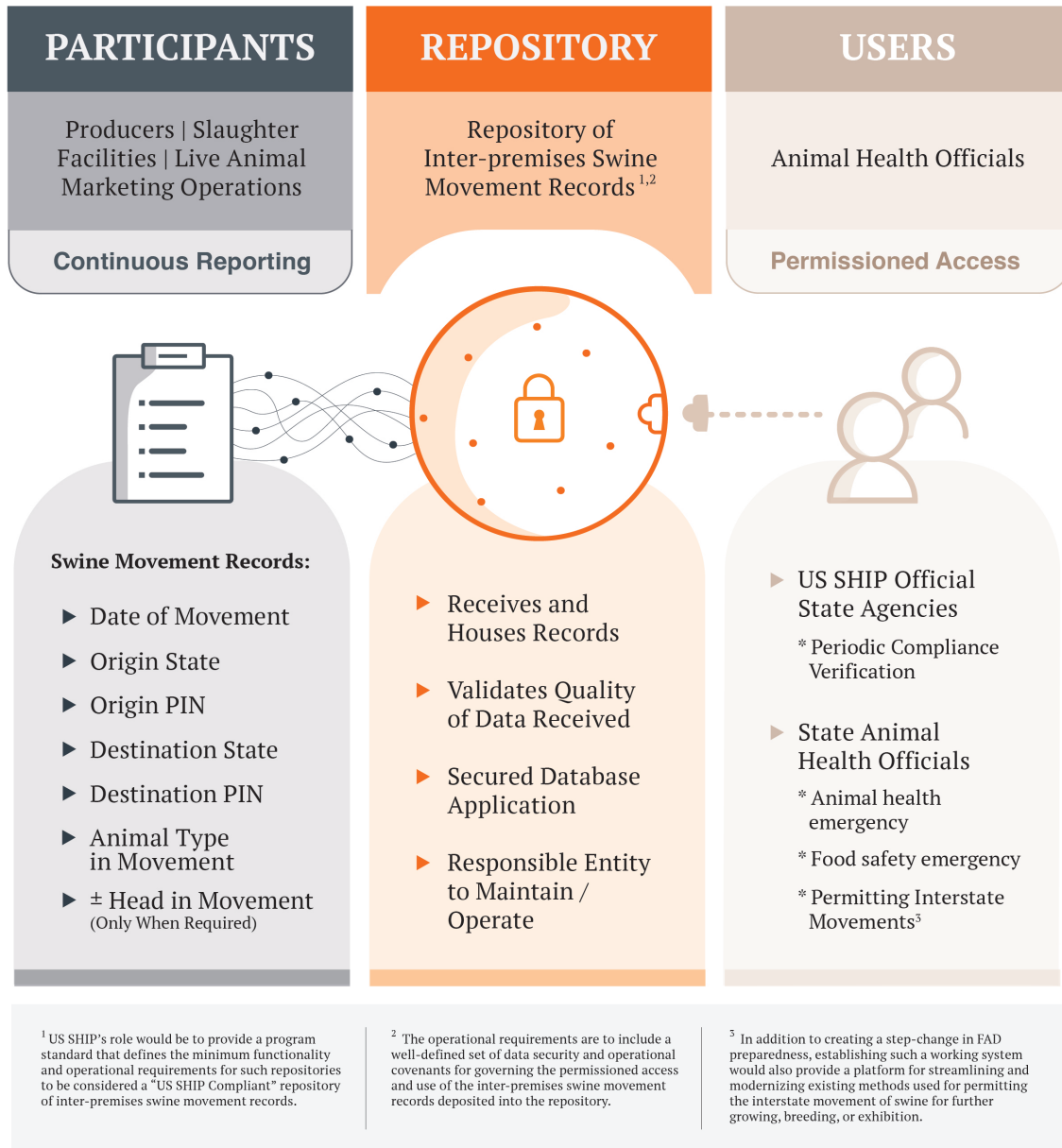


Figure 1. US SHIP Compliant Repository of Interpremises Swine Movement Records

The Pilot Participants:

1. US SHIP participant
 - a. Thirteen small, medium, and large producers participated in this pilot project. The breeding herd inventory of those 13 industry participants accounted for 21.67% of the U.S. swine breeding inventory, as reported by the USDA in December 2023.
 - The participant producers were Acufast, Boerboom Ag Resources, Brenneman Pork, DNA Genetics, Hord, Idlenot Farms GP, Prestage, Pillens, Pipestone Management, Seaboard, Spronk Brothers III, LLLP, The Maschhoffs, and Titan Swine;
 - b. Four packing plants, Prestage (IA), Seaboard (OK), Tyson (IN), and Wholestone Farms (NE), reported slaughter animal movement records;
2. Two entities providing repository services for interpremises swine movement records:
 - a. AgView (<https://www.agview.com/>) housed at the National Pork Board.
 - b. RABapp (<https://rabapp.org/>) housed at North Carolina State University.
3. Fourteen SAHOs participated in and evaluated the pilot project.
 - a. Participant SAHOs were from Illinois, Indiana, Iowa, Nebraska, Kansas, Minnesota, Michigan, Missouri, Mississippi, North Carolina, Ohio, Oklahoma, South Carolina, and South Dakota. Also, the US SHIP OSA of Michigan participated. These 14 states are home to 92.12% of the USA swine inventory. Note that except for Michigan and Ohio, where the US SHIP OSA is housed at the respective State Pork Producers Associations, the US SHIP OSA is housed at the SAHO's office in all other traceability pilot participant states.

Timeline:

The traceability pilot was conducted between February 1st and April 30th, 2024.

The Data:

Participants, i.e., producers and packers, agreed to report animal movement data of pigs moving into and out of their premises either using AgView or RABapp. Producers moving pigs for further growing or breeding usually do the movements under SPHP or CVIs. Since there are legal requirements involved in an SPHP animal movement reporting or issuing a CVI, the reporting of movements under this pilot occurred in parallel to what was reported as a routine practice under SPHP or CVI, i.e., did not replace the legal requirement of reporting animal movements to the SAHO.

Prior to the initiation of the pilot, SAHOs from Iowa, Illinois, Indiana, Kansas, Minnesota, Missouri, Mississippi, North Carolina, Nebraska, Oklahoma, South Carolina, and South Dakota shared their state's requirement of reporting animals moved under SPHP plans list of common fields used to report animal movement under SPHP across states was compiled. Fields for general participant information, origin, and destination were common across states and used for the purpose of this pilot. A complete list of fields used to report animal movements under this pilot for further growing, breeding, or exhibition (parallel project #1) or slaughter (parallel project #2) can be found in Figure 2. A detailed explanation of each parallel project is provided in Appendix A. Participant producers and slaughter facilities were allowed to share intrastate movements, i.e., movements not covered under SPHP or CVI, but those movements were optional in this pilot project.

SPHP Section	Description	Growing, breeding, or exhibition movements	Slaughter movemnts
General information	Date of Movement The date when animals were or will be moved.	X	X
	Head in Movement The number of animals in the shipment.	X	
	Animal Type in Movement (as alternative to purpose, age/sex/lbs) Breeder: sexually intact swine over 6 months of age. Feeder: weaned pig under 6 months of age (nursery, grower, finisher stages) that are not slaughter swine. Slaughter: swine that has been sold or moved for slaughter purposes only. Semen	X	X
	Origin		
	Destination		
Origin	Seller / Consignor Business Name Business name of the origin site.	X	
	Origin Premises ID The Premises Identification Number (PIN) of the origin site.	X	X
	Origin Site/Location Name The name of the origin site.	X	
	Origin Site 911 Address The street address and number for the origin site.	X	
	Origin Site 911 City The name of the city of the origin site.	X	
	Origin Site 911 State The State of the origin site.	X	X
	Origin Site 911 Zip Code The five-digit postal zipcode for the origin site.	X	
	Destination		
	Origin		
Destination	Buyer/Consignee Business Name Business name of the destination site.	X	
	Destination Premises ID The Premises Identification Number (PIN) of the destination site.	X	X
	Destination Site/Location Name The name of the destination site.	X	
	Destination Site 911 Address The street address and number for the destination site.	X	
	Destination Site 911 City The name of the city of the destination site.	X	
	Destination Site 911 State The state of the destination site.	X	X
	Destination Site 911 Zip Code The five-digit postal zipcode for the destination site.	X	
	Origin		
	Destination		

Figure 2. List of fields for reporting animal movements under the US SHIP 2023-2024 pilot and the corresponding sections of the Swine Production Health Plan (SPHP)

Traceability Pilot evaluation and outcomes:

At the end of the pilot project, all involved stakeholders were asked to provide feedback on the pilot using a survey built in Qualtrics. The survey responders were 11 SAHOs, 10 US SHIP OSAs, six producers, one slaughter facility, one pork producer organization, two software providers, and the two managing entities providing a repository of inter-premises swine movement record services.

A successful pilot requires that participants get engaged and provide inputs on their areas of interest; 30 survey respondents agreed that the pilot provided an opportunity to engage and provide input on areas of interest, with the other two being neutral.

One of the pilot's objectives is to identify and correct glitches encountered during the project. The survey response indicated that 14 participants encountered glitches, and 11 of those agreed that glitches had been corrected before the end of the pilot. Specific encountered glitches were shared with the Repositories of Interpremises Swine Movement Record Service Providers and Managing Entities who have the ability to evaluate and pursue suggested improvements.

The variety of participants highlights the complexity of animal movements. For instance, one Managing Entity noted that the movements tracked in this pilot spanned 32 states. Additionally, one SAHO reported receiving data on movements to and from 11 different states. Furthermore, one producer mentioned that their movements involved connections across ten states.

Producers felt confident that the centralized repositories made it easy to move animal movement data from their data collection application(s), e.g., Excell files, Metafarms, PigKnows, PigChamp, etc, to the Repository of Interpremises Swine Movement Record, i.e., either AgView or RABapp. Even though issues with legal confidentiality agreements have prevented some participants from sharing animal movement data, producers also felt confident that data was securely housed when using the repositories and that the repositories have provided permission access to their data to the SAHOs and US SHIP OSAs.

The process of collecting animal movement data has shown to not be easy, with some producers taking over 40 days to deliver the first set of animal movement data to SAHOs under the pilot project. Participants were very pleased by the opportunity to participate in the pilot and have an opportunity to identify glitches and correct them, creating the capability of reporting animal movement records to a Repository of Interpremises Swine Movement Records before a time of need comes, e.g., a foreign animal disease like ASF enters the U.S.

In general there were mixed answers from *SAHOs* indicating that not all of the received data was complete and with acceptable data quality. Also, SAHOs had a mixed perception about repositories being able to promptly deliver animal movement data records to their offices and make data readily available. One key component of animal movement traceability relies on promptly delivering the data to the software being used for emergency response by the SAHO's office. Examples of software used by SAHOs for emergency response include but are not limited to CoreOne, EMRS, State Internal Databases, USAHerds, etc. The connection of delivering animal movement data from the repositories AgView and RABapp to the software used for emergency responses by SAHOs has not been pursued under this pilot and would be the next logical step to establishing a modern animal movement traceability system.

In general, the *SAHOs* were a little skeptical about encouraging other stakeholders to consider using the centralized repositories to report their porcine animal movement data movement records with the current systems. However, they were very supportive and encouraged further development of tools for a sustainable approach. US SHIP OSA's feedback was very similar to SAHOs, with the difference that US SHIP OSAs were more supportive of using the repositories to deliver animal movement records to SAHOs.

During this pilot, the Repositories of Interpremises Swine Movement Record Service Providers did not screen incoming data it did not meet the requirements to be included in the pilot. Self-evaluation from Entities providing repository of interpremises swine movement record services reported that 40% and 95% of the data received in each repository, respectively, was complete. The skepticism seen in the SAHOs' responses about data completeness was also identified by Entities providing repository of interpremises swine movement record services, indicating that complete animal movement data collection is still be a bottleneck for portions of the swine industry.

In general, the experience of the various stakeholders in participating in the pilot can be summarized as follows.

- Producers' experiences in participation were positive and supportive of moving forward with advancements in the traceability project;
- SAHOs were generally favorable to neutral with reluctance to move forward with current systems as they are.
 - Data collection improvements and a connection between the Repositories of Interpremises Swine Movement Records and the software used for management response by SAHOs would be key components for a sustainable animal movement traceability system;
 - The previous work developed by SAHOs on data fields contained in SPHP plans and reaching a consensus for the data fields to be used in this pilot was a considerable milestone achieved under this pilot in partnership with SAHOs. Feedback at the end of the pilot indicated that for a potential discussion of using the Repository of Interpremises Swine Movement Records by US HSIP participants to report movements that occurred under SPHP or CVI would also need to consider an additional field for "inspection date."
- US SHIP OSA's were generally favorable to neutral with reluctance to move forward with current systems as they are;
- Packer was positive but needed more companies to engage fully to understand better how traceability can be performed in this sector;
- Both software systems, AgView and RABapp, have worked well and improved functionality for the purposes of this pilot, albeit continued work would allow improvement in both tools.

Note: by having the participation of both software in the traceability pilot and working as a Repository of Interpremises Swine Movement Record Service Providers, there were also pleased and supportive producers for this endeavor. Both software work with different industry segments, and flexibility in data collection and repository usage are essential for participants by giving them the choice of chosen and using the tools that better fit their needs and business purpose. Future testing and the ability to structure live connections for delivering the animal movement data from the Repository of Interpremises Swine Movement Records to the SAHO emergency response tools would also create an opportunity to have pleased SAHOs.

Key learnings:

- Broad engagement in the US SHIP provides a pathway to help producers get prepared for national mandatory traceability.
- Engagement by all stakeholder groups in the pilot was critical to the success.
- Establishing working relationships between collaborating stakeholders was critical to success.
- Establishing a centralized repository for movement data is feasible, albeit not easy!
 - This traceability pilot has identified that the establishment of the centralized repository(ies) is feasible, albeit there is still a need for considerable advancements for complete animal movement data collection by producers and further development of build-for-purpose capacities for efficient and securely deliverable animal movement data, making it readily available to SAHOs.
- There is still anxiety over data sharing, whether from security concerns or confidentiality. These issues challenge a system of animal movement traceability to be established and readily implemented in time of need, e.g., in the event of an incursion of African Swine Fever in the US.

Opportunities for Moving Forward:

Considering that the ability to proficiently track and trace inter-premises movements of live swine across the breadth of US pork industry participants is a foundational element of foreign animal disease preparedness. The US SHIP traceability works synergistically with other industry endeavors like the National Mandatory Traceability Initiative led by the National Pork Producers Council (NPPC). A resolution establishing the need for national mandatory swine traceability was approved at the 2024 Pork Forum. Broad engagement in the US SHIP provides a pathway to help producers get prepared for such a mandate. Both US SHIP and Mandatory Traceability Initiative are producers' lead, focusing on premises identifications, electronic animal movement data, and animal movement reporting, mandatory traceability also tackles the additional steps on individual animal identification for some segments of the US swine industry.

Continuity in developing the traceability systems and broad engagement of the swine stakeholders is crucial for developing and implementing swine traceability.

Continued demonstration projects and efforts should be directed towards increasing the breadth of representation and engagement, including further discussions with program participants (Producers), SAHOs, US SHIP OSAs, entities responsible for managing/providing services of the repository, national organizations like NPPC, NPB across others, and the software/database individual(s) who represent the application used to support services being provided. Continued traceability efforts would identify GAPS, offer an opportunity for correction, and provide information that can support data-driven decisions to guide further the advancements toward national-scale traceability in the swine industry.

The identification of a path moving forward and enabling producers to utilize the services provided by US SHIP Compliant Repositories of Inter-Premises Movement Records as acceptable means for producers to meet the swine movement record reporting requirements of Swine Production Health Plans (SPHPs) or Certificates of Veterinary Inspection (CVIs) is a current need. The acceptance of reporting animal movements using the US SHIP-compliant repositories across states participating in the US SHIP would create a tangible and sustainable business use case for producers and states to adopt the use of the common standards and technologies that are needed to establish a truly capable national system of traceability across the US pork industry.

Appendix A

Parallel Project # 1 = Interstate movements of swine for further growing, breeding, or exhibition

Participants: producers, practicing veterinarians, SAHOs, and entities providing repository of interpremises swine movement record services to participants.

End Users = SAHOs

This work aimed to conduct a traceability pilot project where pork producers and states that import the largest number of pigs for growing, breeding, and exhibition actively participated in this pilot project and worked collaboratively in such a way that the services provided by an entity functioning as an envisioned “US SHIP Compliant Repository of Inter-premises Swine Movement Records” would meet the requirements for reporting interstate swine movement records.

A primary goal of this endeavor was to test the use of this concept to provide producers with a common way or standard for meeting the regulatory requirements associated with reporting the interstate movements of swine that are being moved to or from any number of different states to further grow, breeding, or exhibition. Correspondingly, this approach aimed to provide SAHOs a modern approach for accessing and/or otherwise receiving and archiving the movement records of swine entering their state from one or more trusted service providers functioning as a US SHIP Compliant Repository of Interpremises Swine Movement Records.

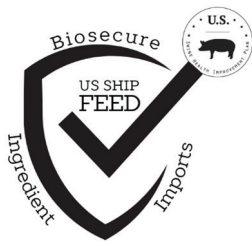
The key measure of success for this pilot was the potential establishment of a highly functional, scalable, and sustainable system for pork producers and state animal health officials that could one day serve to meet the reporting requirements associated with the movement of swine interstate for further growing, breeding, or exhibition that occur in accordance with a corresponding commuter herd agreement or certificate of veterinary inspection.

Parallel Project # 2 = Movements of Live Swine Received & Shipped From Slaughter Facilities

Participants: slaughter facilities, US SHIP OSAs, and entities providing repository of interpremises swine movement record services to participants.

End Users = US SHIP OSAs

This project aimed to report swine movement records of the loads of pigs received and shipped from slaughter facilities within seven days of the actual movement to one of the US SHIP Compliant Repositories of Interpremises Swine Movement Records participating in this pilot project. Ideally, if the pilot went well, this would enable both the slaughter facility participants, US SHIP OSAs, and the Repository of Interpremises Swine Movement Record Service Providers involved to be able to more fully communicate their ongoing movements and support the participant slaughter facility US SHIP certified, i.e., “monitored free”, status.



US SHIP - Feed Biosafety Working Group Biosecure Ingredient Imports Program

Introduction: To mitigate the risk of pathogen introduction through importation of feed ingredients, importers can apply principles of feed biosafety. The Feed Biosafety working group within the U.S. SHIP has created the **Biosecure Ingredient Imports Program** with the goal of creating a series of baseline, standardized practices for producers to communicate with their feed and ingredient providers. The initial target is to apply the standards to any non-bulk ingredient (defined as 1 metric ton packaging or less) originating from or undergoing transit through a region with a known presence of African swine fever virus (ASFV) and/or Classical swine fever virus (CSFV). Most of the non-bulk ingredients used in swine diets are vitamins, trace minerals, amino acids, enzymes, and feed additives, and a significant amount of these are imported. Although the U.S. imports grains from areas affected by both viruses, the scope of the program at this stage will focus on non-bulk ingredients.

Method: The concept of the program is based on 4 actions that can mitigate the risk of introducing ASFV or CSFV through feed ingredient importation (Figure 1). Based on the degree of implementation of these procedures, ingredients may fall into one of four categories using a tiered system indicated with an increasing number of stars (1 to 4 stars). Below, the 4 actions are explained:

1. Traceability:

- Suppliers/importers must have documented traceability practices with the ability to track individual lots of ingredients back to the source, including manufacture location, manufacture date, arrival date to port in the United States, and arrival date to the quarantine location within the United States.

2. Biosecurity at origin:

- Suppliers/importers must certify that a clean container is used when a product is loaded at the port of origin, including a protocol of disinfection of interior surfaces of shipping containers prior to loading using a United States EPA-registered disinfectant approved for use against ASFV applied at the validated concentration and allowed the appropriate contact time.
- There must be no use of refurbished, or re-used bags or pallets. Recycled pallets that went through steam/high-temperature processes are accepted.
- Products must be bagged, palletized, and shrink wrapped prior to loading into shipping container or into the vessel storage hold.
- Containers must be sealed and locked at the location of manufacture or port of origin with tamper proof seals.

3. Biosecurity upon arrival in United States at ingredient importer warehouse:

- If a product arrives damaged, the supplier/importer must handle the product in a biosecure manner, including sealing of damaged packaging, cleaning spilled material to prevent cross-contamination, and disinfecting surfaces contacting spilled material using a United States EPA-registered disinfectant approved for use against ASFV with appropriate contact time.
- In case of product residues from damaged bags in trailers bringing products to the importer’s warehouse, trailer areas with spilled materials must be properly cleaned and disinfected using a United States EPA-registered disinfectant approved for use against ASFV with appropriate contact time following transport of ingredients to quarantine warehouse.

4. Requirements of quarantine facility and process:

- Ingredients imported from ASF/CSF + countries should be stored separately from domestic ones to prevent cross-contamination and contact with personnel during the quarantine period.
- Ingredients should be stored for a minimum of 30 days under controlled temperature before being eligible to be transported to feed manufacturing facilities.
- The quarantine facility should implement biosecurity measures to reduce the risk of employees and visitors becoming contaminated during the quarantine of incoming ingredients. The use of dirty/clean lines and signage in English and Spanish is recommended.
- Employees and visitors are required to observe a 5-day downtime period prior to being admitted entry to the facility following travel to a region with known presence of ASFV and/or CSFV, regardless of pig contact.

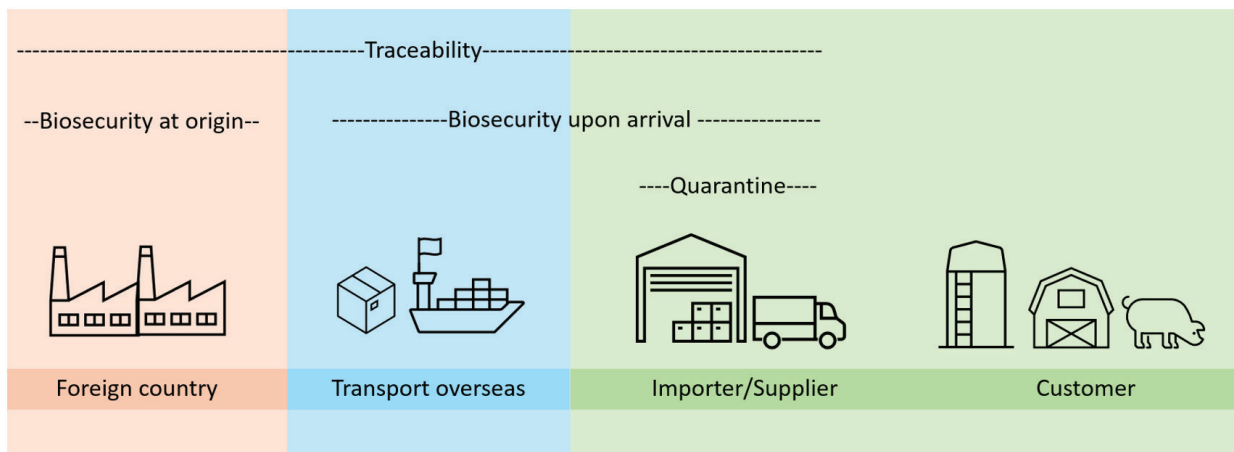






Figure 1. Sites where each of the four biosecurity practices were evaluated

Applying the information to a 4-star tier system (Table 1) will generate the product status.

Table 1. Four-star tier: biosafety practices when importing from ASF/CSF affected countries

					
Biosecurity	Traceability	✓	✓	✓	✓ or ✗
	at origin	✓	✓	✓	✓ or ✗
	upon arrival	✓	✓	No clean truck policy	✓ or ✗
Quarantine	Area	Enclosed, dedicated forklift	Segregated, not enclosed	Common area	No control
	Time	≥ 30 d (at the warehouse)	≥ 30 d (at the warehouse)	≥ 30 d (since container sealed)	No control
	Temp.	≥ 75°F	≥ 68°F	No control	No control

Nutritionists and procurement teams from 8 swine production companies were contacted from October/2023 to March/2024 to introduce the program and invite them to volunteer for the survey. They were asked to provide information regarding biosecurity practices applied by the importer/supplier to non-bulk ingredients manufactured in ASF/CSF affected countries and used in swine diets. With the information in hands, nutritionists filled out the survey, listing ingredients’:

- Inclusion rate in all swine diets
- Numeric and volumetric participation in all swine diets
- Country of origin
- Category (amino acid, vitamin, trace mineral, enzyme, antibiotic, or feed additive)
- Ingredient status based on tier system (based on importer biosecurity practices)
- Limitation to move up 1 star in the tier

Results: Data captured from 7 production systems were compiled into graphs presented below. Figure 2 indicates an average of 31.4, 42.6, and 29.7% of non-bulk ingredients imported from ASF/CSF + countries used in nursery, grow-finish, and sow diets, respectively. However, the inclusion rate average in all three production categories is below 1% of the complete diet (Figure 3), being 0.92, 0.45, and 0.61% for nursery, grow-finish, and sow diets, respectively. Also, Figures 2 and 3 highlight the variation between systems in terms of the number and the inclusion rate of these ingredients. Of all non-bulk ingredients imported from ASF/CSF + countries imported by the companies surveyed, 45% do not undergo any biosecurity practices at the warehouse (Figure 4). Additionally, 43% guarantee 30 d of holding time since the container is sealed but hold the products in a common area and/or do not apply any temperature control, while 12% keep these ingredients at or above 68°F. Of the companies participating in the survey, none apply the 4-star practices to any feed ingredient. Figure 5 depicts that amino acids, vitamins and trace minerals represent the largest volume of non-bulk ingredients imported from ASF/CSF + countries and are the ones that are carried as a 1, 2, and 3-star standard.

All Enzymes, feed additives, and antibiotics undergo some biosecurity practices at the warehouse, reaching 2 or 3 stars. Finally, Figure 6 points out that China is the main origin of the non-bulk ingredients imported from ASF/CSF + countries. The survey found 10 positive countries sourcing swine feed ingredients for the US industry.

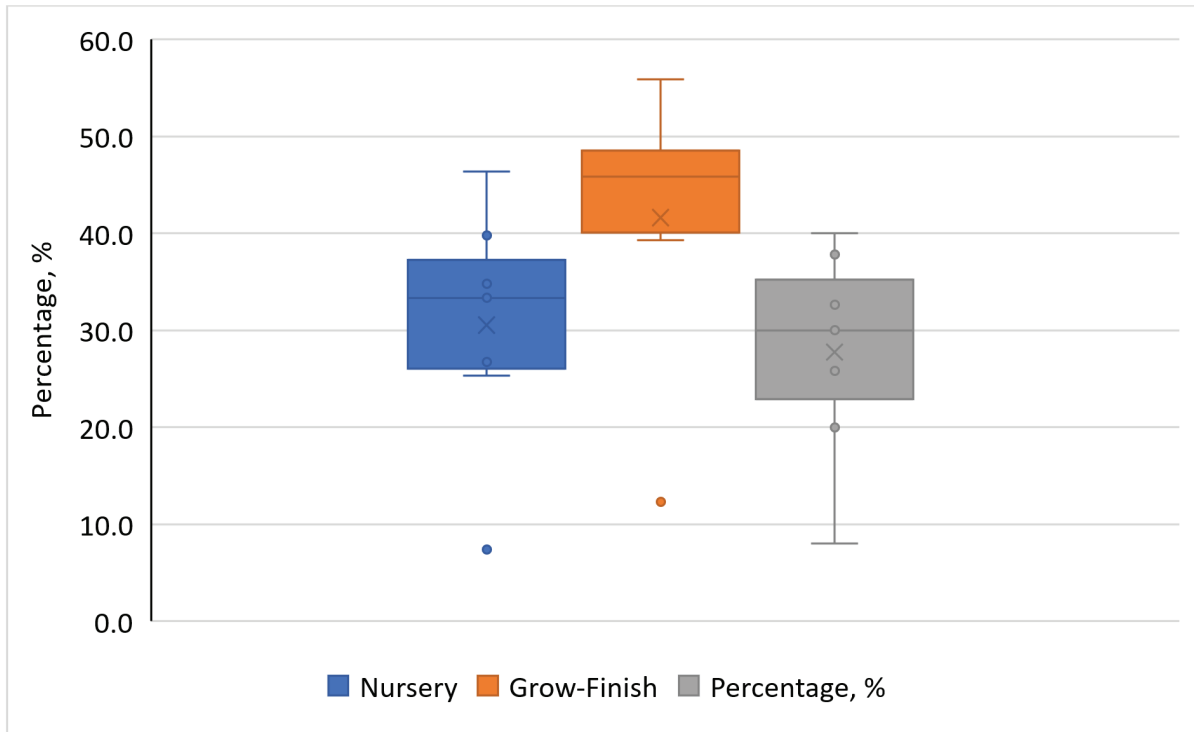


Figure 2. Percentage distribution of the number of ingredients (non-bulk imported from ASF/CSF + countries) in complete nursery, grow-finish, and sows diets from 7 production companies.

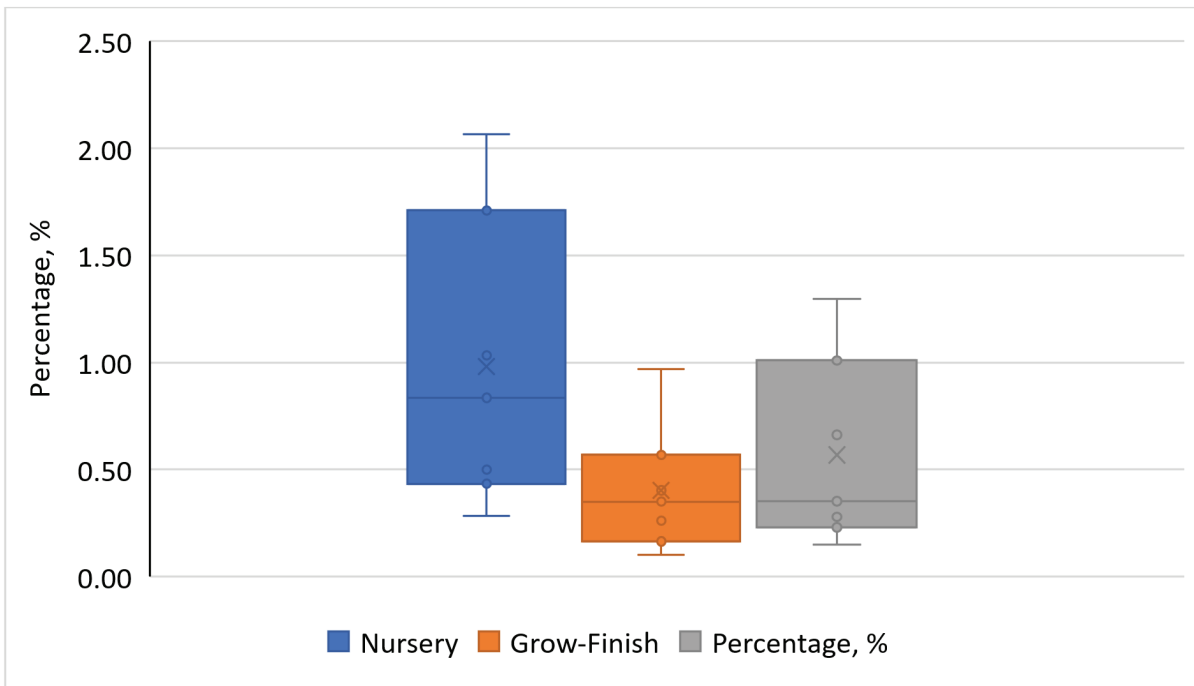


Figure 3. Inclusion rate distribution of ingredients (non-bulk imported from ASF/CSF + countries) in complete nursery, grow-finish, and sows diets

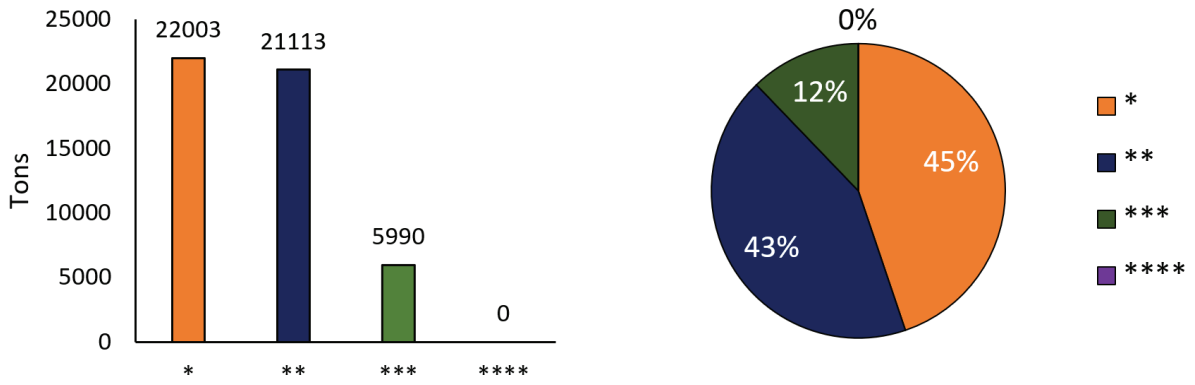


Figure 4. Tons and percentage of ingredients (non-bulk imported from ASF/CSF + countries) according to the four-star tier of biosecure practices.

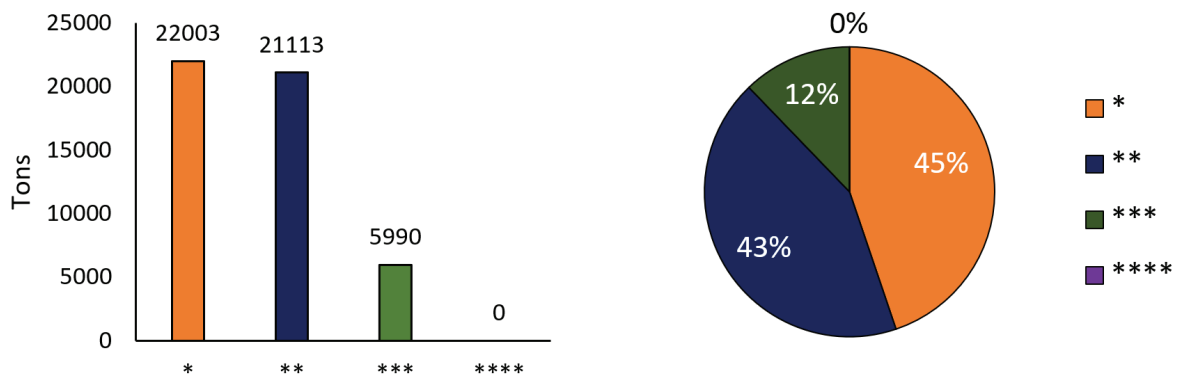


Figure 5. Tons and Category of the ingredients (non-bulk imported from ASF/CSF + countries) according to the four-star tier of biosecure practices.

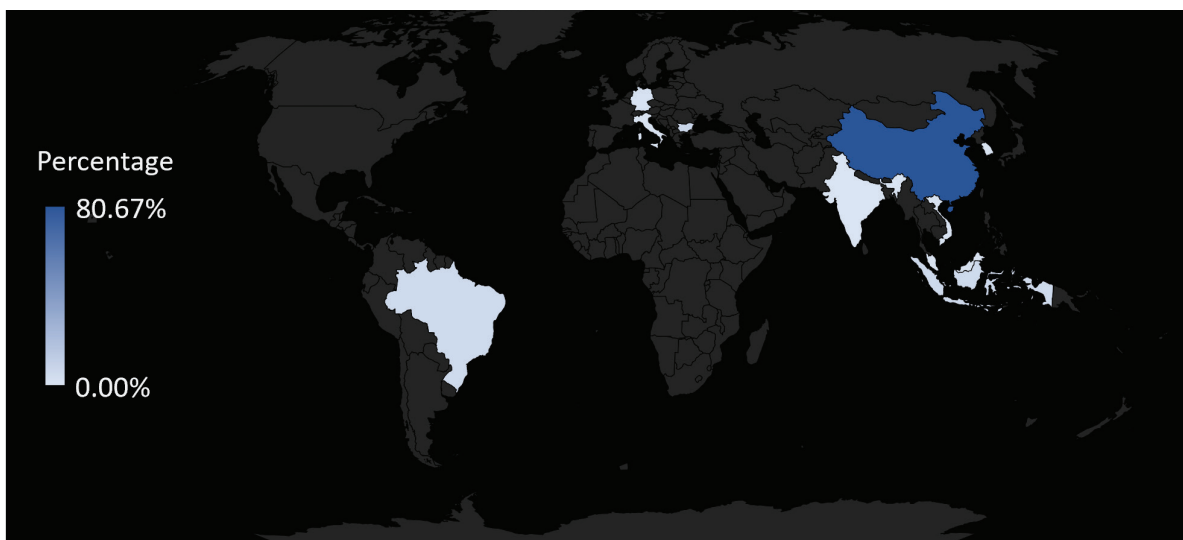


Figure 6. Percentage of ingredients (non-bulk imported from ASF/CSF + countries) according to its country of origin.

Preliminary Conclusion: Results so far indicate the US swine industry's reliance on ASF/CSF positive countries for non-bulk feed ingredients. From swine production companies surveyed thus far, over 50% of these imports undergo biosecurity practices, but many do not meet minimum holding time and temperature requirements or are handled alongside domestic ingredients. Although the risk of introducing foreign diseases through non-bulk feed imports is low, it remains possible and additional information should be gathered to fully determine the risk and how to implement practices to mitigate it.

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US SHIP Site Biosecurity Feral Swine Mitigation Working Group

This working group was a continuation of the site biosecurity working group from the last 2 years charged to work on incorporating feral swine mitigation strategies for swine with outdoor access into an upcoming revision of the Secure Pork Supply.

The group had 3 primary objectives:

1. Establish process of keeping future revisions of Secure Pork Supply aligned with US-SHIP.
2. Review Secure Pork Supply Enhanced Biosecurity Plan - Pigs with Outdoor Access for incorporation of feral pig risk mitigation options.
3. Discuss developing a resolution for a working group to evaluate small holdings and non-commercial producers to have a Secure Pork Supply Enhanced Biosecurity Plans for HOD 2024 meeting.

The National Pork Board is in the process of assembling a team of producers and veterinarians to serve as the Secure Pork Supply Revision Working Group that will begin their evaluation of the Secure Pork Supply Plan beginning in 2025. There will be several members of the feral swine mitigation working group that have been asked to serve on this NPB Working Group, which should help to ensure that US-SHIP alignment during the revision process. To further strengthen this relations, this working group will be bringing forth a resolution that ***requests the National Pork Board's Secure Pork Supply Working Group to consider recommendations work with US SHIP leadership to ensure that any future revisions to the Secure Pork Supply Plans fit the needs of US SHIP Site Biosecurity now and in the future.***

The 2023 US-SHIP feral swine mitigation working group came up with a list of best practices that were shaped into a Feral Swine Mitigation Plan. The concept of the feral swine mitigation plan, along with all the options that were developed will be some of the recommendations that will be passed along to the NPB Secure Pork Supply Revision Working Group. Other recommendations to be passed along for consideration by the NPB SPS working group will be having an accredited veterinarian to help to develop and sign off on the plan as well as a recommendation for a formal review process with some periodicity (e.g. annual, bi-annual, etc).

Another focus area was the discussion surrounding how to engage small holdings and non-commercial producers and encourage them to participate in US-SHIP, particularly surrounding site biosecurity. Another recommendation for the NPB SPS working group will be to investigate the development of SPS enhanced biosecurity plan for exhibition swine. There needs to continue to be education and discussion with small holdings and non-commercial producers about site biosecurity and the hope is that revisions to the Secure Pork Supply plan (2026) will lead to improved participation by small holdings and non-commercial producers.

Market Haul Sanitation Pilot

Evaluating alternative options for monitoring truck sanitation status

Edison Magalhaes (Iowa State University) and Ryan Pudenz (Prestage Farms)

Introduction:

The 2022 US SHIP House of Delegates approved Resolution 2022-4, which included a pilot study to evaluate alternative methods for monitoring truck sanitation status. A partnership with Prestage Farms was formed to test these methods at their packing plant and truck wash facilities in Eagle Grove, IA. Data was collected from July 10 to August 18, 2023.

Approach:

Three data sources were tested:

- 1. Truck & Trailer GPS Data**
- 2. Manual in-site check-in**
- 3. Sanitation App (CleanTrailer by animalEYEQ)**

The overall objective of this pilot study was to assess three independent platforms to allow swine producers to automatically assess washing compliance through recorded events concerning truck-wash and market pigs deliveries at packing plant. This is a critical step to enable verifying the status of trailers and providing analytics regarding market haul sanitation compliance. To achieve this goal of assessing independent platforms for recording truck-related events, the project was divided in three parts. A Truck Automated Sanitation Classification (TASC) platform was developed to integrate and analyze data from these sources, allowing then to assess the performance of the different methods to record trailer wash events and delivery of pigs at the packing plant.

Data Collection and Analysis:

- **GPS Trackers:** Installed on trucks and trailers, using SAMSARA software to record data at 30-second intervals for trucks and 30-minute intervals for trailers. Geofences were set up around the truck wash and packing plant to track entry and exit events.
- **CleanTrailer App:** An Android app used to record truck wash events with photos before and after washing. Data from this app was also analyzed.
- **In-site check-in records**

Results:

A total of 6 different data reports were utilized to build the algorithms on SAS and develop the master table for Prestage Farms:

- Truck wash trailer GPS geofence
- Truck wash truck GPS geofence
- CleanTrailer App report
- Packing plant trailer GPS geofence
- Packing plant truck GPS geofence
- In-site manual truck & trailer check-in

The six different reports mentioned above provided data concerning entry and exit dates & times in each location, which were imported using the algorithms mentioned above on SAS to create the following automated reports back to the producers:

- Individual license plate report
- Truck wash report
- The packing plant report

Key Findings:

- **Integration and Reporting:** The TASC platform successfully combined data from GPS and the CleanTrailer App to provide comprehensive sanitation reports.
- **Accuracy:** GPS data was more accurate but prone to errors, while the CleanTrailer App was effective for verification but had a few missed entries. The quality of trailer-related data was higher compared to truck data alone.
- **Geofences:** Properly adjusted geofence limits were crucial for accurate data. Inaccurate geofences led to errors in reporting wash events and deliveries.
- **Scalability:** The methods and TASC platform can be scaled to other swine production systems.

Lessons Learned:

- **Platform Efficiency:** The TASC platform can help identify gaps and improve market haul sanitation.
- **Data Quality:** The accuracy of data is crucial for effective monitoring. Improved GPS refresh rates and geofence adjustments can minimize errors.
- **App Utility:** While the CleanTrailer App is useful for verification, combining it with GPS data provides a more complete picture of sanitation status.

The pilot demonstrated that integrating these technologies can effectively monitor and improve truck sanitation practices in swine production systems.

Acknowledgments:

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Market Haul Sanitation

Evaluating alternative sanitation methods for market trailers

Edison Magalhaes, Ethan Aljets, and Rodger Main (Iowa State University)

Introduction:

Trailers returning from terminal points such as slaughter facilities are at high-risk for spreading pathogens within U.S. swine production systems. Despite progress in optimizing gold-standard trailer-cleaning methods to prevent pathogen transfer to pigs, there has been limited controlled research on the relative risks of pathogen transfer from livestock trailers to farm sites using different cleaning methods. Quantifying these risks is crucial for assessing the efficacy of various cleaning practices. This study aimed to evaluate how different livestock trailer cleaning methods affect the risk of disease introduction to farm sites when transporting hogs.

Objectives:

The primary objective of this study was to evaluate the effectiveness of various livestock trailer cleaning methodologies in reducing the risk of introducing Porcine Epidemic Diarrhea Virus (PEDV) to farm sites during hog load-out. Specifically, the study assessed the following methods. Each treatment was replicated five times, resulting in a total of 25 samples.

Materials & Methods:

Study Design:

The study was conducted in two phases:

- 1. Trailer Inoculation and Treatment Application** (April 22 - May 2, 2024): Trailers were inoculated with PEDV and subjected to one of the five cleaning treatments.
- 2. PEDV Measurement and Detection** (May 6 - May 16, 2024): After treatment, environmental samples from the trailers and farm-site loading areas were collected and analyzed.

The study utilized three 1:61 scale model aluminum trailers, which were inoculated with a known amount of PEDV mixed with swine feces. The feces were sourced from a PEDV-naïve sow farm and combined with a laboratory-propagated PEDV isolate.

Phase 1 - Trailer Inoculation and Treatment Application:

Each trailer was inoculated with PEDV and then treated according to the specified methodology. Following treatment, the trailers were subjected to simulated foot traffic. Environmental samples were collected from both the trailer floor and the farm site loading area.

Treatment Groups:

1. **Positive Control:** No cleaning was performed and trailers were inoculated with PEDV-positive feces.
2. **Dry Clean, Scrape and Bake (TADD):** Fecal material was mechanically removed and trailers were baked until reaching 71°C (160°F).
3. **Volume Hose Wash + Disinfect:** Trailers were washed with a water hose and then disinfected with Synergize®.
4. **Power Wash + Disinfect:** High-pressure washing was followed by disinfection with Synergize®.
5. **Negative Control:** Trailers were not cleaned and inoculated with PEDV-negative feces.

Phase 2 - PEDV Measurement and Bioassay:

Samples from the trailer surfaces and farm-site loading area were tested for PEDV using quantitative PCR (qPCR) to determine the viral load. Additionally, bioassays with 10-day-old pigs were conducted to detect viable PEDV in the farm-site loading area.

Results:

Phase 1 - Trailer Inoculation and Treatment Application:

Pre-Treatment Viral Load: Initial Ct values across all treatments were similar and with Ct values close to 20, indicating a high concentration of PEDV.

Post-Treatment PCR Results:

- **Positive Control:** Ct values remained around 20.2 post-treatment, indicating minimal reduction in PEDV levels and highlighting the ineffectiveness of no cleaning.
- **Dry Clean, Scrape and Bake:** post-treatment Ct value increased to around 25-26, indicating some reduction in viral load but less effective compared to other methods.
- **Volume Hose Wash + Disinfect:** Ct value post treatment increased to around 29-30, demonstrating a substantial reduction in PEDV, although some residual virus was present.
- **Power Wash + Disinfect:** Ct value post-treatment increased to ~35, marking the highest reduction in viral load and proving the most effective method.

Phase 2 - Detection of Viable PEDV in Farm Site Loading Area:

At day 0 post-inoculation, all pigs tested negative for PEDV. By days 4 and 7, the positive control group showed consistent PEDV positivity, while the negative control group remained negative. The scrape and bake treatment resulted in 60% positivity for PEDV. In contrast, the volume hose & disinfect and power wash & disinfect treatments stayed negative for PEDV. Clinical signs of PEDV appeared on day 1 in the positive control and scrape and bake groups, with inconsistent diarrhea noted in other groups.

Discussion:

The study demonstrates that power wash and disinfect treatments are significantly more effective at reducing PEDV contamination compared to other methods. The positive control showed minimal reduction, underscoring the importance of effective cleaning protocols. Scrape & bake and volume hose wash + disinfect methods also showed improvements but were less effective than power wash + disinfect. The persistent presence of PEDV on farm-site surfaces, even after thorough cleaning, highlights the need for comprehensive biosecurity measures and thorough cleaning practices to prevent disease spread.

Conclusion:

The power wash + disinfect method was identified as the most effective in reducing PEDV contamination, as indicated by the highest increase in Ct values post-treatment. This method combines mechanical and chemical cleaning, achieving the lowest viral load on trailer surfaces and in farm-site areas. All methods showed some level of effectiveness, emphasizing the importance of selecting appropriate cleaning protocols to manage and prevent PEDV spread in livestock environments.

Acknowledgments:

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PEDV Elimination Task Force

Update – July 2024

Task Force Members: Marisa Rotolo and Paul Yeske co-chairs; Mary Battrell, Pete Thomas, Darin Madsen, JQ Zhang, Tyler Holck

Porcine Epidemic Diarrhea virus (PEDV) was first introduced to the US in 2013 and causes high morbidity and mortality in young pigs with significant economic impact. PEDV spread very rapidly in 2013/2014 impacting an estimated 40% of the US sow farms; however, the Morrison Swine Health Monitoring Project now estimates that over 80% of the US sow herds are negative for PEDV.

The American Association of Swine Veterinarians (AASV) Executive Committee commissioned a PEDV Task Force in Feb 2024 to assess the potential to eliminate PEDV from our US swine herd. The Task Force has five primary goals, those goals and related progress updates are as follows:

- 1. Determine the best available means of identification for industry prevalence**
 - a. Established a team of epidemiologists from University of Minnesota (Dr. Cesar Corzo) and Iowa State University (Dr. Giovanni Trevisan) to work collaboratively to combine learnings from MSHMP and SDRS
 - b. Assessing options and resources for further PEDV surveillance, specifically in the growing pig population
- 2. Assess current and promote further development of intervention tools**
 - a. Received AASV approval for the following position statement: **For the long-term success of PEDV elimination, an effective intervention tool (e.g., modified live vaccines, subunit vaccines, vaccines using RNA or DNA technology, antivirals, etc.) is needed to reduce shedding of field virus and/or stimulate immunity. This would reduce the PEDV reservoir that exists in the US post-weaned population and therefore eliminate the need for intentional exposure in replacement breeding stock.**
- 3. Debate the largest present biosecurity gaps and needs as an industry**
 - a. Currently working collaboratively with the National Pork Board and their efforts toward further biosecurity research
- 4. Outline a PEDV Control and Elimination certification category for debate at the US SHIP HOD**
 - a. Drafted US SHIP Resolution 2024-6 for debate and vote at HOD 2024
- 5. Introduce and successfully hand off PEDV Elimination to an organized body such as US SHIP**
 - a. US SHIP as a health certification program could provide the framework for PEDV certification at the site level but additional planning and leadership for a national elimination program would be outside of the scope of US SHIP.
 - b. Assessing the Manitoba Pork PEDV Elimination program as a potential model for the US Swine Industry (<https://www.manitobapork.com/swine-health/ped>)

The AASV PEDV Elimination Task Force drafted the following resolution and clarification for consideration at the US SHIP HOD 2024 and encourages states to support this effort. If the resolution is approved at HOD 2024, the Task Force will also introduce a similar resolution for consideration at the upcoming United States Animal Health Association (USAHA) convention in October 2024 to continue to assess the political will for eliminating PEDV.

US SHIP HOD RESOLUTION NUMBER 2024-6

Now, therefore be it RESOLVED: The US SHIP House of Delegates requests the US SHIP staff and stakeholders to work collaboratively with the PEDV centered working groups recently established by the American Association of Swine Veterinarians and the National Pork Board to evaluate the next steps and potential for introducing a PEDV health status certification within US SHIP to be considered by the 2025 US SHIP House of Delegates.

Note of Clarification: The ASF/CSF Monitored certification is the baseline and only required certification within US SHIP (similar to the Salmonella pullorum being the baseline certification in NPIP). Additional certifications for endemic diseases such as PEDV are envisioned to be optional and utilized by participants in an ala-carte fashion in a manner similar to how NPIP participants have used the growing number of health-status certifications for various diseases of high consequence. Therefore, a participant currently certified as ASF/CSF Monitored would not be required to participate in a PEDV certification to remain certified as ASF/CSF Monitored.

