U.S. Swine Health Improvement Plan (U.S. SHIP)



House of Delegates Meeting

September 2 – 4, 2025

Proposed Resolutions and Standards for the Pilot Program

2025 Proposed Resolutions and Standards

Proposed Resolutions

2025-1	Explore the potential for pseudorabies and brucellosis monitored certification program in U.S. SHIP.
2025-2	Explore the potential for <i>Mycoplasma hyopneumoniae</i> (Mhp) certification in U.S. SHIP
2025-3	Approve aggregate samples for ASF/CSF surveillance outside of Control Areas
2025-4	Adopt U.S. SHIP sampling & testing standards as adopted by U.S. SHIP House of Delegates
2025-5	Task force - Use of aggregate samples in ASF/CSF Control Area surveillance testing algorithms
2025-6	Establishment of a U.S. SHIP Stakeholder's Working Group that develops consistent SHIP standards for producer enrollment and certification
2025-7	Proxy voting system for U.S. SHIP House of Delegates
2025-8	Support for U.S. SHIP Federal Advisory Committee Act (FACA) General Conference Committee upon codification of the U.S. SHIP program
2025-9	Explore the potential for setting up pilot project(s) demonstrating PEDV Monitored status in U.S. SHIP

Proposed Standards

- 2025-1 Use of aggregate samples in commercial scale breeding herd ASF/CSF Risk Level 3 testing requirements
- 2025-2 Certification requirements for voluntary Porcine Epidemic Diarrhea Virus Clean Classification within U.S. SHIP

TITLE: Explore the potential for pseudorabies and

brucellosis Monitored certification program in

U.S. SHIP.

SUBMITTER: KS Department of Agriculture

RESOLUTION: The U.S. SHIP House of Delegates requests the

U.S. SHIP staff and stakeholders to work collaboratively to establish a working group to evaluate the potential for introducing a PRV and brucellosis monitored health status certification

within U.S. SHIP to be considered by the 2026

U.S. SHIP House of Delegates.

Similar to the 2024 Resolution to explore the potential for PEDV certification in U.S. SHIP this

would be an optional certification for

participants. The ASF/CSF Monitored certification is the baseline and only required certification within U.S. SHIP (similar to the *Salmonella pullorum* being the baseline certification in NPIP). Additional certifications for endemic diseases 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 PRV and/or brucellosis certification to remain certified as ASF/CSF

Monitored.

TITLE: Explore the potential for *Mycoplasma*

hyopneumoniae (Mhp) certification in U.S. SHIP.

SUBMITTER: MN Delegation

RESOLUTION: Whereas, the U.S. Swine Health Improvement

Plan (U.S. SHIP) is an industry, State, and Federal

partnership that centers on establishing a

national program for safeguarding, certifying, and

bettering the health of U.S. swine and competitiveness of the U.S. pork industry.

Whereas, the initial scope of U.S. SHIP has been focused on establishing the ASF/CSF Monitored

certification.

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

Now, therefore be it resolved: the U.S. SHIP House of Delegates requests the U.S. SHIP staff and stakeholders to work collaboratively with an established Minnesota Mhp working group to evaluate the next steps and potential for a Mhp health status certification within U.S. SHIP.

TITLE: Approve aggregate samples for ASF/CSF

surveillance outside of Control Areas

SUBMITTER: U.S. SHIP Sampling & Testing Working Group (M

Paustian, M Schwartz, R Main)

RESOLUTION: Whereas, in the event of an incursion of ASF/CSF

into the United States, broadly applicable and uniform disease surveillance and testing regimens of farm site premises for ASF/CSF outside of Control Areas is a foundational component of the U.S. SHIP ASF/CSF Monitored

certification program.

Whereas, the effectiveness of aggregate samples (most notably oral fluids) for use in detecting ASF/CSF is well documented and supported in the peer-reviewed literature.

Whereas, aggregate samples have been well-studied, have a long-standing track record of success, and are broadly used at scale for herd-level detection of endemic viruses of high consequence by U.S. pork industry participants.

Whereas, U.S. pork producers and swine veterinarians know how to proficiently collect and submit aggregate samples to diagnostic labs and the USDA NAHLN labs certified to conduct ASF/CSF testing are well-equipped for testing aggregate sample types at scale.

Whereas, aggregate samples check all of the boxes of the key elements of the sample types needed for the U.S. SHIP ASF/CSF Monitored surveillance strategy (i.e., practical, effective, user-friendly, broadly applicable, scalable, supported by sound science, and leverage the breadth of expertise of the veterinarians, pork producers, diagnosticians, and veterinary diagnostic labs actively working to support and protect the health of U.S. swine on a daily basis).

Now, therefore be it resolved: the U.S. SHIP House of Delegates requests USDA to broadly accept the utility of aggregate samples (e.g., oral fluids and processing fluids) as approved sample types for the U.S. SHIP ASF/CSF Monitored use case of conducting ASF/CSF surveillance (screening tests) outside of Control Areas.

TITLE: Adopt U.S. SHIP sampling & testing standards as

adopted by U.S. SHIP House of Delegates

SUBMITTER: U.S. SHIP Sampling & Testing Working Group (M

Paustian, M Schwartz, R Main)

RESOLUTION: Whereas, bringing industry, State, and Federal

partners together to derive the U.S. SHIP's

program content and direction through a rigorous

democratic process (U.S. SHIP House of Delegates) is core to the intent and operating

principles of the U.S. SHIP.

Whereas, the current U.S. SHIP sampling and testing requirements have and will continue to be thoughtfully informed via U.S. SHIP House of Delegates that includes representation of the full breadth of U.S. pork industry participants, subject matter experts with industry and species-specific practical know-how, and have a personally vested interest in the success of the program.

Whereas, in the event of an introduction of ASF/CSF into the U.S., the U.S. SHIP ASF/CSF Monitored sampling and testing requirements serve to provide a practical, effective, uniform, and broadly recognized system of surveillance for enhancing early detection and demonstrating evidence of freedom of disease outside of Control Areas.

Whereas, albeit the current testing requirements for the ASF/CSF Monitored certification are not overly costly or burdensome on an individual farm site basis, if broadly implemented among U.S. pork industry participants, the collective power of detection derived through the surveillance strategy being implemented would be the most capable and robust system of real-time disease surveillance of livestock that has ever been implemented in the history of the U.S.

Now, therefore be it resolved: the U.S. SHIP House of Delegates requests USDA to support and fully adopt the current U.S. SHIP Sampling & Testing Standards (Sample Types & Sampling Requirements) as have been set via the work and resulting actions of U.S. SHIP House of Delegates Forums held in 2021, 2022, 2023, and 2024.

TITLE: Task force - Use of aggregate samples in ASF/CSF

Control Area surveillance testing algorithms

SUBMITTER: U.S. SHIP Sampling & Testing Working Group (M

Paustian, M Schwartz, R Main)

RESOLUTION: Whereas, having the ability to capably respond to

a large-scale (multifocal) outbreak of ASF/CSF in the United States is of utmost importance to U.S.

pork industry participants, dependent

communities, and the security of the U.S. food

supply chain,

Whereas, current ASF/CSF Control Area testing algorithms that include collecting samples from 31 individual animals per barn on a recurring basis are not such that could be realistically implemented in the instance of a large scale (multi-focal) outbreak of ASF/CSF in pig dense

regions of the U.S.,

Whereas, the limitations concerning the practical operational and fiscal realities of being able to collect, prepare, and process the 31 individual animal samples per barn for testing were a well-recognized constraint during the far reaching "Swine Fever Exercise for Agriculture and Response (SFEAR)" conducted in 2019,

Whereas, the use of aggregate samples for detection of ASF/CSF is well-supported by the scientific literature.

Whereas, aggregate samples (most notably oral fluids and processing fluids) have a long-standing track record of use and success for herd-level detection of endemic viruses of high consequence in the U.S. pork industry.

Whereas, U.S. pork producers and swine veterinarians can proficiently collect and submit

aggregate samples to USDA NAHLN labs for testing.

Whereas, proactively utilizing U.S. pork industry participant expertise towards helping to inform alternative Control Area testing algorithm options to the current (primary) option of 31 individual animal samples per barn that could be made available for use in the event of a large scale (multi-focal) outbreak of ASF/CSF in the U.S. would seemingly be a prudent and responsible step forward in the continual improvement of the ASF/CSF preparedness and response plans in the United States.

Now, therefore be it resolved: the U.S. SHIP House of Delegates requests a Resolution be put forth by the United States Animal Health Association (USAHA) Committee on Swine for the USDA to establish a task force of industry, state, and federal partners whose specific purpose centers on developing additional options for the ASF/CSF Control Area surveillance testing algorithms that include incorporating the utility of aggregate samples.

TITLE: Establishment of a U.S. SHIP Stakeholder's

Working Group that develops consistent SHIP

standards for producer enrollment and

certification

SUBMITTER: Wisconsin Pork Association

RESOLUTION: Whereas, the U.S. SHIP is an industry, State, and

Federal partnership that centers on establishing a national program for safeguarding, certifying, and bettering the health of U.S. swine and the competitiveness of the U.S. pork industry; and

Whereas, the success and credibility of any national swine health program relies on

standards that are clear, consistent, and relevant

to ensure alignment and assurance among

stakeholders; and

Whereas, U.S. pork producers are the backbone of the U.S. SHIP program and therefore, should provide direction on what the purpose and relevance U.S. SHIP program standards should

be.

Whereas, there is a need to clarify expectations and verification of U.S. SHIP program standards to ensure that all Official State Agencies (OSAs) are holding their pork producers to the same standards to uphold the program's credibility and ability to safeguard, certify, and better the health of U.S. swine and the competitiveness of the U.S. pork industry;

Now, therefore be it resolved: that a stakeholder working group be established to review current program standards and recommend language to ensure standards are consistent and aligned regarding enrollment and certification for all producers as well as clarify and verify a producer's biosecurity role and purpose in U.S. SHIP; and

Furthermore, the U.S. SHIP Program Standards Working Group shall consist of one pork producer representative from each of the draft ISU pilot GCC regions as outlined in the draft rule as well as three State Animal Health Officials and one member of the USDA APHIS U.S. SHIP administrative staff; and

The U.S. SHIP Program Standards Working Group shall collaborate over the next 12 months to determine what the consistent program standards should be, clarify farm level biosecurity certification and program compliance expectations, and ensure procedures and practices are adoptable at all levels within the pork industry. This working group shall bring forth their recommendations for approval at the 2026 HOD meeting.

TITLE: Proxy voting system for U.S. SHIP House of

Delegates

SUBMITTER: IN Delegation

RESOLUTION: The Indiana delegation proposes the formation of

a task force comprised of a cross section of the SHIP delegate body to develop a proposal for a proxy voting process to be implemented at SHIP

House of Delegates business meetings.

The proposal should contain, at a minimum, suggestions for how to submit notice of intent to vote by proxy, minimum in-person attendance requirements to conduct SHIP business, and the maximum number of proxy votes to be exercised

per in-person attendee.

TITLE: Support for U.S. SHIP Federal Advisory

Committee Act (FACA) General Conference Committee upon codification of the U.S. SHIP

program

SUBMITTER: Mike Walker, Dr. Mary Battrell, Dr. Christine

Mainquist-Wingham, Dr. Brian Hoefs

RESOLUTION: Whereas, the U.S. Swine Health Improvement

Plan (U.S. SHIP) is an industry, State, and Federal

partnership that centers on establishing a

national program for safeguarding, certifying, and

bettering the health of U.S. swine and competitiveness of the U.S. pork industry

modelled after the long-standing National Poultry

Improvement Plan (NPIP),

Whereas, the U.S. SHIP House of Delegates (HOD) incorporated an elected GCC in the final 2 years of the pilot program with the intended functionality similar to the NPIP. These functions included assisting the USDA in planning, organizing, and conducting the annual HOD and to represent the cooperating States in advising the plan administrators with respect to administrative procedures and interpretations of the Plan provisions, and assisting in evaluating comments received from interested persons concerning proposed amendments to the Plan provisions. If the GCC models after its corollary in NPIP, upon codification of the SHIP program, the committee would also recommend to the Secretary of Agriculture any changes in the provisions of the Plan as may be necessitated by unforeseen conditions when postponement until the next HOD would seriously impair the operation of the program, serve as an official advisory committee for the study of problems relating to swine health and as the need arises, to make specific recommendations to the Secretary of Agriculture concerning ways in which the USDA may assist the industry in solving these

problems, serve as a direct liaison between the SHIP and the United States Animal Health Association, and advise and make recommendations to the USDA regarding SHIP involvement or representation at swine industry functions and activities as deemed necessary or advisable for the purposes of the SHIP

Now, therefore be it resolved: the U.S. SHIP House of Delegates requests the USDA pursue approval to establish a FACA for a U.S. SHIP GCC and establish elections for GCC members at subsequent House of Delegate meetings once the U.S. SHIP program is codified.

TITLE: Explore the potential for setting up pilot project(s)

demonstrating PEDV Monitored status in U.S.

SHIP

SUBMITTER: AASV and the MN Delegation

RESOLUTION: The U.S. Swine Health Improvement Plan (U.S.

> SHIP) is an industry, State, and Federal partnership that centers on establishing a

national program for safeguarding, certifying, and

bettering the health of U.S. swine and

competitiveness of the U.S. pork industry, U.S. SHIP House of Delegates approved a resolution in 2025 to evaluate next steps and potential for introducing a PEDV health status certification within U.S. SHIP. A standard for PEDV Clean certification is being considered at this, the 2025 U.S. SHIP House of Delegates as an option for high-health farms involving frequent surveillance consistent with current practices by genetics and

multiplication sites.

Now, therefore be it resolved: the U.S. SHIP House of Delegates requests the pursuit of pilot project(s) to develop and assess practical and effective potential standards to establish a PEDV Monitored certification status to be considered by the 2026 U.S. SHIP House of Delegates.

PROPOSED STANDARD NUMBER: 2025-1

TITLE: Use of aggregate samples in commercial scale

breeding herd ASF/CSF Risk Level 3 testing

requirements

SUBMITTER: Drs. Rebecca Robbins, Christine Mainquist-

Whigham, Paul Yeske, Corrine Fruge, Howard Hill

RESOLUTION: Amend existing Risk Level 3 Program Standard to

add an additional testing requirement (Program Standard) for Commercial Scale Breeding Herds in ASF/CSF Risk Level 3 that is inclusive of an aggregate sample type(s) and in addition to the

existing individual sick sow requirement.

The aggregate sample types would be "1 processing fluid per 1000 sows per month or 5 FOF per 1000 sows per month, pooled by 5".

Context: this change to the sampling standard would increase probability of detection of nonnegative herds located outside a control area immediately after ASF/CSF incursion or in positive State or Region. Early detection in Commercial Breeding Herds routinely weaning pigs off-site is of greatly elevated importance due to the often far and wide distribution of the pigs being weaned as a strategy to lower disease transmission between herds/regions/States.

ADDENDUM TO PROPOSED STANDARD 2025-1

Relevance to producers and field application:

- 1. We want to capture all portions of the population to improve disease detection since piglets are a significant portion of the "breeding herd" population
- 2. We have recognized that piglet/litter sampling is easy and requires minimal cost and skill to complete and has already been widely accepted and practiced in breeding herds to assign disease status.
- 3. 89% of breeding herds wean piglets off-site, frequently to other States/regions, making piglets a potential vector for disease spread worth actively monitoring.

Evidence in support of sample type and sampling strategy:

Easily collected aggregate samples for monitoring sow herds include processing fluids and oral fluids (family oral fluids or pen-based samples from group-housed sows).

Processing fluid is the liquid ("tissue transudate") produced by one freeze/thaw of testicles and tails collected at piglet processing. Processing fluid is an aggregate sample that represents all the piglets from whom the tissues were collected, but male piglet tissues (testicles) represent the bulk of the sample. Lopez et al. (2021), in the context of optimizing PRRSV detection, recommended including processing tissues from no more than 30 litters (~320 piglets). Processing fluids contain both antibody from the dams (colostrum) and nucleic acids from pathogens infecting the piglets. Thus, antibody in processing fluid reflects the dams' infection/vaccination status and nucleic acid reflects the piglets' infection status (Poonsuk and Zimmerman, 2018).

Biologically, processing fluid is the same as "meat juice" (meat tissue transudate) - a specimen used extensively for the antibody-based surveillance of influenza A virus, *Mycoplasma hyopneumoniae*, PRRSV, pseudorabies virus, *Salmonella* spp., and a variety of other pathogens (Christensen et al., 1999; Meemken et al., 2014; Mortensen et al., 2001). In terms of surveillance, processing fluids were first used to indirectly surveil sow herds for PRRSV, influenza A virus, porcine circovirus 2, porcine parvovirus, *Mycoplasma hyopneumoniae* and *Salmonella enterica* infections by testing for pathogen-specific antibody (Boettcher et al., 2010). Subsequent work showed that detection of viral nucleic acids in processing fluids was likewise highly effective for the surveillance of PRRSV (Lopez et al., 2018; Vilalta et al., 2018; Senecavirus (Otterson et al., 2019), and ASFV (Ambagala, 2023). Notably, Ambagala reported that "*one ASF infected pig among 100 pigs could be successfully detected by testing pooled processing fluids*". Thus, the historic data and recent research support the use of tissue transudate sample, and processing fluids specifically, in disease surveillance.

The use of **oral fluids** in swine surveillance was first reported in 2005 (Zhou and Zimmerman, 2005), introduced into routine diagnostic testing in 2010, and quickly adopted by the industry. For example, in 2022, 460,150 PCR assays were performed on oral fluids for seven major pathogens of swine (IAV, MHP, PCV2, PDCoV, PEDV, PRRSV, and TGEV) at five diagnostic laboratories (Iowa, Kansas, Ohio, Minnesota, and South Dakota) (G. Trevisan, personal communication).

Oral fluid-based testing is widely used in the swine industry because the approach is diagnostically sensitive, samples are easily collected, and pathogen-specific nucleic acids and antibodies can be detected against a variety of endemic and exotic pathogens, including ASFV, CSFV, FMDV, and others (Henao-Diaz et al., 2020; Munguía-Ramírez et al., 2022). Ambagala (2021) reported that they detected ASFV in a pen containing up to 25 pigs when only one of the pigs in the pen was infected. Specific to sow herd surveillance, Almeida et al. (2021) reported that family oral fluids were effective for PRRSV detection in farrowing rooms and research-in-progress by Tarasiuk et al (2025) is showing that the collection of oral fluids from group-housed sows is as easy as oral fluid sampling in other age groups.

References

- Almeida MN, Zhang M, Zimmerman JJ, et al. 2021. Finding PRRSV in sow herds: family oral fluids vs. serum samples from due-to-wean pigs. Prev Vet Med 193:105397.
- Ambagala A. 2021. African swine fever surveillance using oral fluids for rapid detection and disease control (NPB #19-194). National Pork Board Final Research Grant Report.
- Ambagala A. 2023. Evaluation of processing fluids and other novel sample types for the detection and surveillance of less-virulent ASFV strains (NPB #20-152). National Pork Board Final Research Grant Report.
- Boettcher J, Hensch A, Gagl A, et al. 2010. Testicles of castrated piglets an anachronism but a powerful sample for disease surveillance in sow herds. Proc 21st IPVS Congress, Vancouver, Canada, p. 304.
- Christensen J, Baggesen DL, Soerensen V, Svensmark B. 1999. Salmonella level of Danish swine herds based on serological examination of meat-juice samples and Salmonella occurrence measured by bacteriological follow-up. Prev Vet Med 40:277-292.
- Henao-Diaz A, Giménez-Lirola L, Baum DH, Zimmerman J. 2020. Guidelines for oral fluid-based surveillance of viral pathogens in swine. Porc Health Manag 6:28.
- Lopez WA, Angulo J, Zimmerman JJ, Linhares DCL. 2018. Porcine reproductive and respiratory syndrome monitoring in breeding herds using processing fluids. J Swine Health Prod 26:146-150.
- Lopez WA, Gauger PC, Harmon KM, et al. 2021. Probability of PRRS virus detection in pooled processing fluid samples. Vet Microbiol 261:109190.
- Meemken D, Tangemann A. H., Meermeier D, et al. 2014. Establishment of serological herd profiles for zoonoses and production diseases in pigs by "meat juice multi-serology". Prev Vet Med 113:589-598.
- Mortensen S, Strandbygaard B, Bøtner A, et al. 2001. Monitoring porcine reproductive and respiratory syndrome virus infection status in swine herds based on analysis of antibodies in meat juice samples. Vet Res 32:441-453.
- Otterson TL, Blomberg P, Rovira A. 2019. Senecavirus A detection frm piglets using processing fluid samples. Proc AAVLD Annual Conference, Providence Rhode Island, p. 54.
- Poonsuk K, Zimmerman J. 2018. Historical and contemporary aspects of maternal immunity in swine. Anim Health Res Rev 19:31-45.
- Tarasiuk G, Giménez-Lirola LG, Wang C, Zimmerman J. Establishing oral fluid sampling guidelines for group-housed sows. A research project funded by the Swine Health Information Center.
- Vilalta C, Sanhueza J, Alvarez J, et al. 2018. Use of processing fluids and serum samples to characterize porcine reproductive and respiratory syndrome virus dynamics in 3 day-old pigs. Vet Microbiol 225:149-156.
- Zhou E-M, Zimmerman JJ. Nov 2005. Novel approaches for PRRS diagnosis: Identification of PRRS antibodies in oral fluid and meat juice. Proc 13th Annual Swine Disease Conference for Swine Practitioners. Iowa State University, Ames, Iowa, pp. 135-138.

PROPOSED STANDARD NUMBER: 2025-2

TITLE: Certification requirements for voluntary Porcine

Epidemic Diarrhea Virus Clean classification

within U.S. SHIP

SUBMITTER: AASV and the MN Delegation

RESOLUTION: The AASV PEDV Elimination Task Force has

> developed proposed sampling and testing requirements to confer the status of PEDV Clean certification within U.S. SHIP. PEDV Clean status applies to premises with expected negative herds

for PEDV and is voluntary within U.S. SHIP.

PEDV Clean certification will be conferred after a site accumulates > 3 months of negative testing results and continues to test negative following the program standards (3 months of historical testing results may satisfy the requirements). PEDV Clean certification sampling and testing requirements are listed in Table 1. The producer and their herd veterinarian will choose a sample type (and related assay) and refer to the CSSC program for sampling and handling protocols. Testing must be conducted at a USDA NAHLN lab or AAVLD laboratory certified for PEDV testing. Producers must collect at least 3 months of testing by their methodology of choice prior to switching between serology (serum sample type) or molecular. If clinical signs are present, this must be reported immediately.

In the event of a non-negative test result, producers must take 15 fecal samples to confirm test results as well as a veterinarian's assessment that no clinical signs are present. Samples must be collected from the same pigs or pen that were originally sampled within 14 days of the non-negative result. Should a site become positive, they will lose their PEDV Clean status and be required to comply with the original 3 months of negative testing as outlined above for re-certification.

Table 1. PEDV Clean sampling and testing requirements

Production Site Type	Specimen Type(s)	Individual (I) or Aggregate (A)	Comments	Frequency/Timing of Sampling	# of Individuals	# of Pools* (Groups of up to 5)	# of samples
Boar stud Mature boars, distributing semen, Isolation	Feces Oral fluids	l or A	PCR	Twice a month	3 boars across site Or warm up pen	1	1
Breeding Herd Breed to Wean, Breeding/Gestation/ or Farrow Only, +On-Site GDU or Isolation	Farrowing crate – feces	I or A	- PCR	Monthly	9 crates across total farrowing	3	3
	Gestation - oral fluids	А			3	-	3
Growing Pig Nursery, Grower, Finisher, Isolation, Replacement stock	Feces	I or A	PCR	Prior to first movement	9 pens across site	3	3
	Fecal swabs	I			15 pigs across site	3	3
	Oral fluids	А			3 pens across site	-	3
Small Holding >100 or <1,000 Breeder or Feeder Swine	Feces	I	- PCR	Monthly	9 pens across site	3	3
	Oral fluids	А			3 pens across site	-	3
Non-Commercial <100 Breeder or Feeder Swine	Feces	I	- PCR	Monthly	9 pens across site	3	3
	Oral fluids	А			3 pens across site	-	3
*Pen-based oral fluids	s cannot be poole		rology Option i	n lieu of PCR testing			
All premises	Serum	I	FMIA or FFN	Monthly	30 pigs (oldest animals or weaned pigs)	-	30