Swine Disease Reporting System
Report # 100 (June 2, 2026)

What is the Swine Disease Reporting System (SDRS)? SDRS includes multiple projects that aggregate data from participating veterinary diagnostic laboratories (VDLs) in the United States of America, and reports the major findings to the swine industry. Our goal is to share information on activity of endemic and emerging diseases affecting the swine population in the USA, assisting veterinarians and producers in making informed decisions on disease prevention, detection, and management.

After aggregating information from participating VDLs and summarizing the data, we ask for the input of our advisory group, which consists of veterinarians and producers across the US swine industry. The intent is to provide an interpretation of the observed data, and summarize the implications to the industry. Major findings are also discussed in monthly podcasts. All SDRS reports and podcasts are available at https://fieldepi.org/sdrs/.

Swine Health Information Center (SHIC)-funded Domestic Swine Disease Surveillance Program: collaborative project among multiple VDLs, with the goal to aggregate swine diagnostic data and report it in an intuitive format, describing dynamics of pathogen detection by PCR-based assays over time, specimen, age group, and geographical area. Data is from the Iowa State University VDL, South Dakota State University ADRDL, University of Minnesota VDL, Kansas State VDL, Ohio VDL, and Purdue ADDL.

Collaborators:

Swine Disease Reporting System office: Principal investigators: Daniel Linhares & Giovani Trevisan; Project coordinator: Quyen Thuc Le; Software Developer: Kinath Rupasinghe; Data Analyst: Sajan Kumar Thallapelly and Likhitha Nakka.

Iowa State Uni.: Gustavo Silva, Marcelo Almeida, Bret Crim, Eric Burrough, Phillip Gauger, Christopher Rademacher, Darin Madson, Michael Zeller, Rodger Main.

Uni. of Minnesota: Cesar Corzo, Albert Rovira, Matt Sturos, Hemant Naikare.

Kansas State Uni. and Kansas Dept. of Agr.: Rob McGaughey, Franco Matias-Ferreyra, Jamie Retallick, Jordan Gebhardt, Sara McReynolds.

South Dakota State Uni and South Dakota AIB: Jon Greseth, Darren Kersey, Travis Clement, Angela Pillatzki, Jane Christopher-Hennings, Eric Nelson, Mendel Miller and Marc Hammrich.

Ohio Veterinary Diagnostic Laboratory and *The Ohio State Uni*: Melanie Prarat, Dennis Summers, Andréia Arruda.

Purdue Uni and *Indiana State BOAH*: Craig Bowen, Kenitra Hendrix, Joseph Boyle, James Lyons, Kelli Werling.

Disease Diagnosis System: Consisting of reporting disease diagnosis (not just pathogen detection by PCR), based on diagnostic codes assigned by veterinary diagnosticians from ISU-VDL and OH-VDL.

PRRSView and FLUture and : Aggregates PRRSV and influenza A virus diagnostic data from the ISU-VDL. PRRSLoom-Variants: PRRSV-2 variant classification from UMN.

PRRS virus Genotyping report and BLAST tool: Benchmark PRRSV ORF5 sequences and compare your PRRSV sequence with what have been detected in the U.S.

Audio and video reports: Key findings from SDRS projects are summarized monthly in a conversation between investigators and is available in the Spotify, Apple Podcast, YouTube, LinkedIn, and the SDRS webpage. In addition to this report, interactive dashboards and educational material are publicly available.

Advisory Group: Mark Schwartz, Megan Niederwerder, Paul Yeske, Deborah Murray, Brigitte Davenport, Peter Schneider, Sam Copeland, Luc Dufresne, Daniel Boykin, Corrine Fruge, William Hollis, Rebecca Robbins, Thomas Petznick, Kurt Kuecker, Lauren Glowzenski, Brooke Kitting and Dustin Oedekoven.

Note: This report contains data up to May 31, 2026.

Topic 1.1 – Detection of PRRSV RNA over time by RT-qPCR.

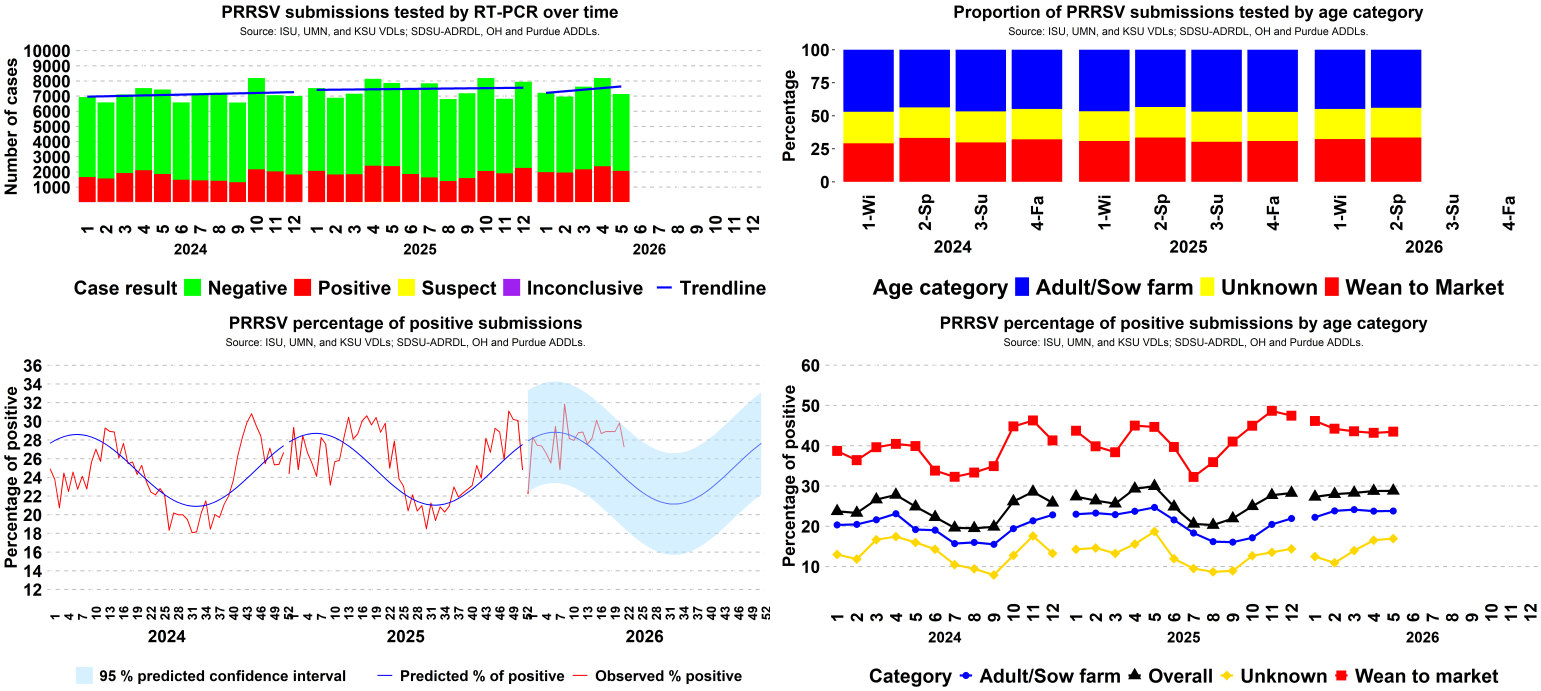
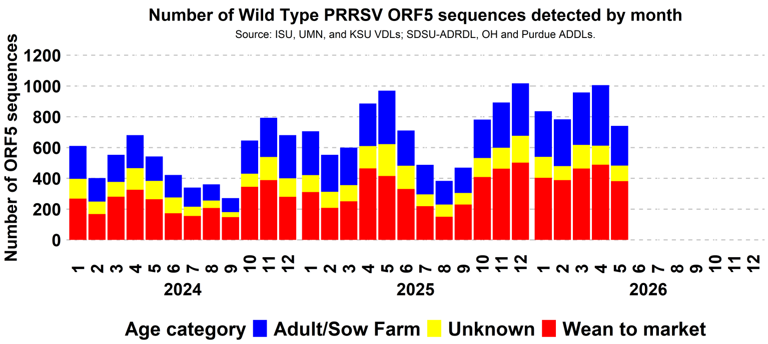


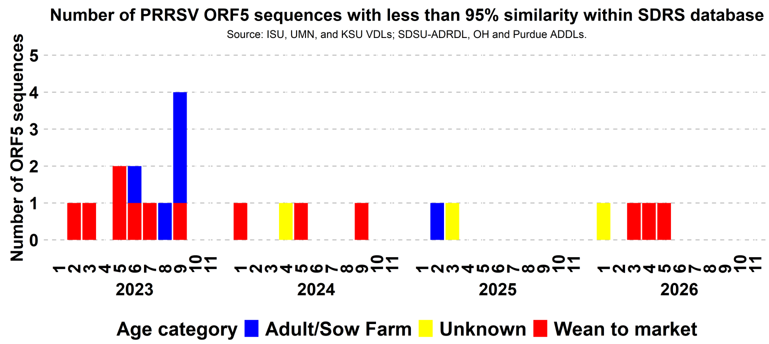
Figure 1. Top: *Left*: Results of PRRSV RT-PCR cases over time; *Right*: Proportion of accession ID cases tested for PRRSV by age group per year and season. **Bottom**: *Left* Expected percentage of positive results for PRRSV RNA by RT-qPCR, with 95% confidence interval band for predicted results based on weekly data observed in the previous 4 years; *Right*: Percentage of PRRSV PCR-positive results, by age category, over time. Wean to market corresponds to nursery and grow-finish. Adult/Sow correspond to Adult, boar stud, breeding herd, replacement, and suckling piglets. Unknown corresponds to not informed site type or farm category.

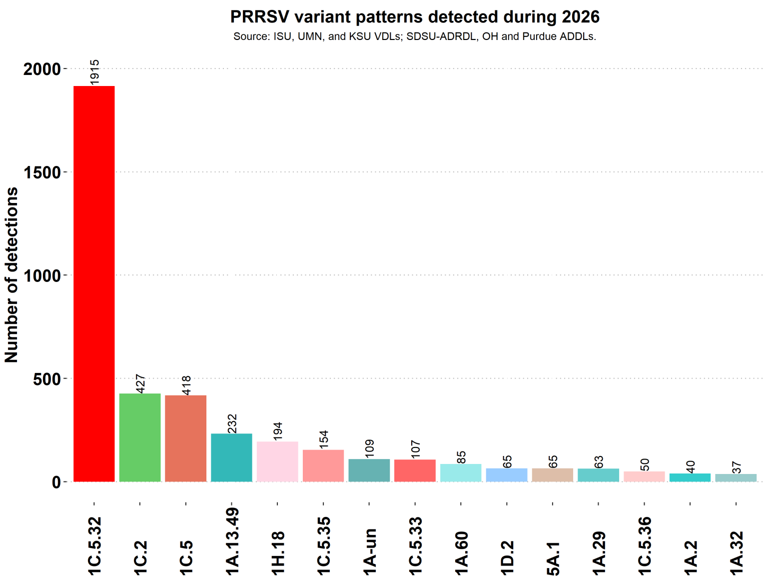
SDRS Advisory Group highlights:

- Overall, 28.84% of 7,137 cases tested PRRSV-positive in May, similar to 28.75% of 8,194 in April.
  - Positivity in the adult/sow category in May was 23.8% (758 of 3,185), similar to 23.77% (857 of 3,606) in April.
  - Positivity in the wean-to-market category in May was 43.49% (1,032 of 2,373), similar to 43.21% (1,199 of 2,775) in April.
  - Overall PRRSV-percentage of positive cases was 3 standard deviations above state-specific baseline in IA, SD, and IL.
  - Some advisors noted that the continued rise in PRRSV is difficult to fully explain. However, a higher prevalence of infected farms acting as reservoirs for transmission likely plays a significant role, and area spread remains an important contributing factor.

Topic 1.2 – PRRSV ORF5 sequences detection over time







Most frequent PRRSV variants detected across U.S. states in 2026

Source: ISU, UMN, and KSU VDLs; SDSU-ADRDL, OH and Purdue ADDLs.

SiteState	First Most Frequent	Second Most Frequent	Third Most Frequent
IA	1C.5.32 - 1173	1C.5 - 266	1C.2 - 211
IL	1C.5.32 - 233	1C.5.35 - 11	1C.5 - 10
IN	1C.5.35 - 51	1C.5.32 - 36	1A.54 - 25
KS	1C.5.32 - 3	1A.58 - 2	1A.2 - 1
MN	1C.5.32 - 239	1H.18 - 61	1C.5 - 26
MO	1C.5.32 - 91	1C.5 - 61	1C.2 - 15
NC	1C.2 - 135	1A-un - 65	1A.60 - 49
NE	1C.5.33 - 75	1C.5 - 25	1A.13.49 - 17
OH	1C.5.35 - 65	1C.5.32 - 32	1A.13.49 - 7
OK	1C.5.32 - 16	1A.2 - 3	1E.1 - 2
SD	1C.2 - 19	1A.13.49 - 9	1C.5.32 - 6

Figure 1. Top: **Left**: Number of PRRSV ORF5 sequences detected by age category; **Right**: Number of PRRSV ORF5 sequences with less than 95% similarity after BLAST analysis with the sequences in the SDRS database (Sequences with more than 6 ambiguities, sequences with less than 597 nucleotides or higher than 606 nucleotides are not included in this analysis); **Bottom** *Left*: 15 PRRSV ORF5 sequences most frequent detected by variant; *Right*: Most frequently detected PRRSV ORF5 sequences in 2026, shown by variant at the U.S. state level along with their respective detection counts **Note: un indicates unclassified**.

SDRS Advisory Group highlights:

- During May, the states with higher number of PRRSV 1C.5.32 detections were detected IA, MN, IL, MO, IN, NE, NC, OH, SD, KS (respective number of sequences: 204, 54, 41, 14, 11, 7, 2, 2, 2, 1);
- In May 1C.5.32 (348) was the PRRSV variant most detected in the U.S., followed by 1C.5 (77), and 1C.2 (65);
- SDRS database identified first-time detection of PRRSV variants according to provided site state:
  - April 2026: 1C.5.33 (KS), 1A.29 (MI, CO), 1C.5.32 (CO), 1A.13.49 (OH)
  - May 2026: 1C.5.35 (OK), 1E.12.13 (OH), 1H.18 (CA)
- Click on the links below to access the PRRSV genotype dashboard and the SDRS BLAST tool to compare your PRRSV ORF5 sequence with the SDRS database.

Topic 2 – Enteric coronavirus RNA detection by RT-qPCR

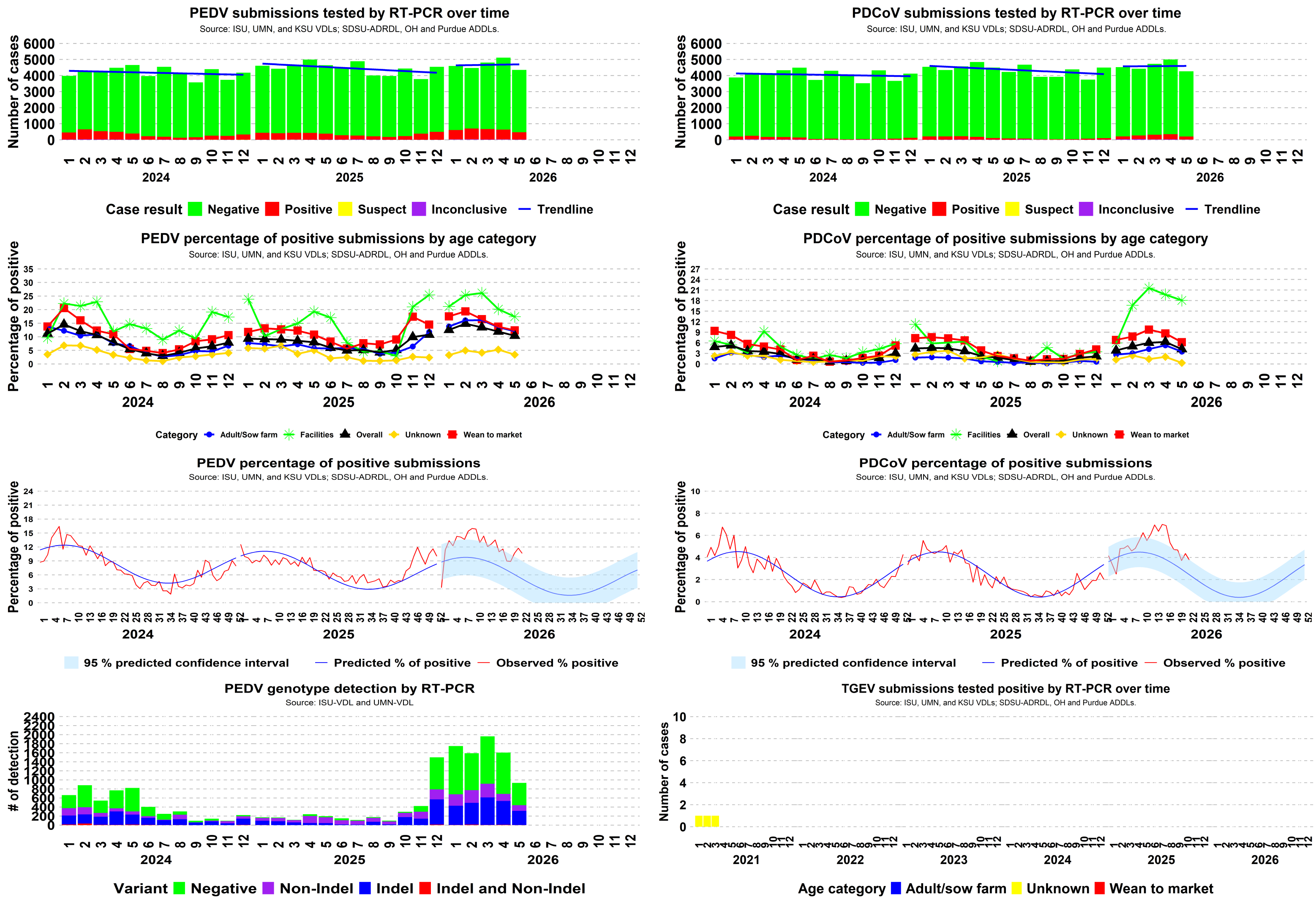
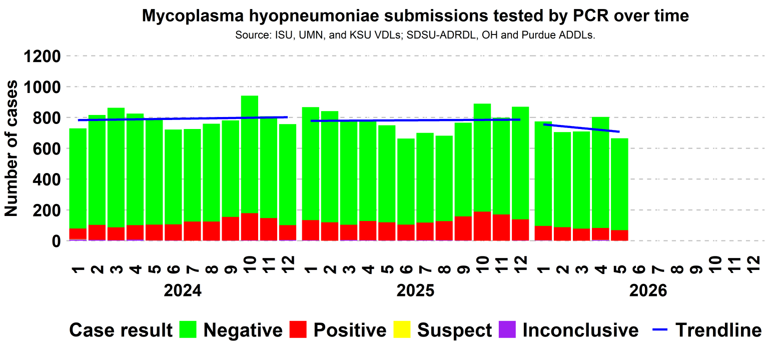


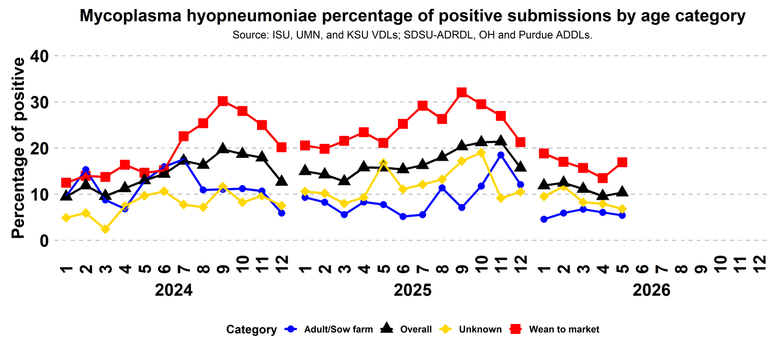
Figure 1. Top: Left PEDV; Right PDCoV cases tested by RT-PCR over time. Second from top: Left PEDV; Right PDCoV percentage of positive RT-PCR results by age category. Third from top: Left PEDV; Right PDCoV expected percentage of positives with 95% CI for 2026 prediction. Bottom: Left PEDV genotype detection over time; Right TGEV positive cases by age category.

SDRS Advisory Group highlights:

- Overall, 10.39% of 4,352 cases tested PEDV-positive in May, similar to 11.92% of 5,117 in April.
  - Positivity in the adult/sow category in May was 12.05% (209 of 1,734), similar to 13.52% (261 of 1,930) in April.
  - Positivity in the wean-to-market category in May was 12.37% (182 of 1,471), similar to 13.73% (244 of 1,777) in April.
  - Positivity in the facilities category in May was 17.42% (27 of 155), a moderate decrease from 20.2% (41 of 203) in April.
  - Overall PEDV-percentage of positive cases was within state-specific baselines in all 11 monitored states.
  - Overall, 0.32% of 933 samples had mixed PEDV genotype detection in May, similar to 0.56% of 1,604 in April.
- Overall, 4.19% of 4,268 cases tested PDCoV-positive in May, a moderate decrease from 6.26% of 5,000 in April.
  - Positivity in the adult/sow category in May was 3.51% (60 of 1,709), similar to 5.29% (100 of 1,891) in April.
  - Positivity in the wean-to-market category in May was 6.17% (88 of 1,426), a moderate decrease from 8.68% (149 of 1,717) in April.
  - Positivity in the facilities category in May was 18.06% (28 of 155), similar to 19.7% (40 of 203) in April.
  - Overall PDCoV-percentage of positive cases was 3 standard deviations above state-specific baseline in KS and OK.
- There was 0 positive case for TGEV RNA-PCR in May, 2026 over a total of 4,129 cases tested. It has been 62 months (with a total of 238,542 cases tested) since the last TGEV PCR-positive result.

Topic 3 – Detection of *M. hyopneumoniae* DNA by PCR.





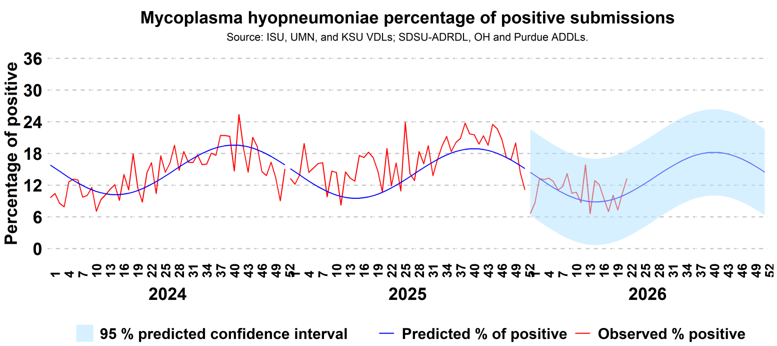


Figure 1. Top: *Left* MHP Case results tested by PCR over time. *Right* MHP PCR-positive results, by category over time. **Bottom:** expected percentage of positive results for MHP by PCR and 95% confidence interval for 2026 predicted value, based on weekly data observed in the previous 10 years.

SDRS Advisory Group highlights:

- Overall, 10.38% of 665 cases tested *M. hyopneumoniae*-positive in May, similar to 9.58% of 804 in April.
  - Positivity in the adult/sow category in May was 5.43% (15 of 276), similar to 6.09% (19 of 312) in April.
  - Positivity in the wean-to-market category in May was 16.91% (46 of 272), a moderate increase from 13.49% (46 of 341) in April.
  - Overall MHP-percentage of positive cases was within state-specific baselines in all 11 monitored states.

Topic 4 – Detection of Porcine Circoviruses type 2 and 3 DNA by PCR.

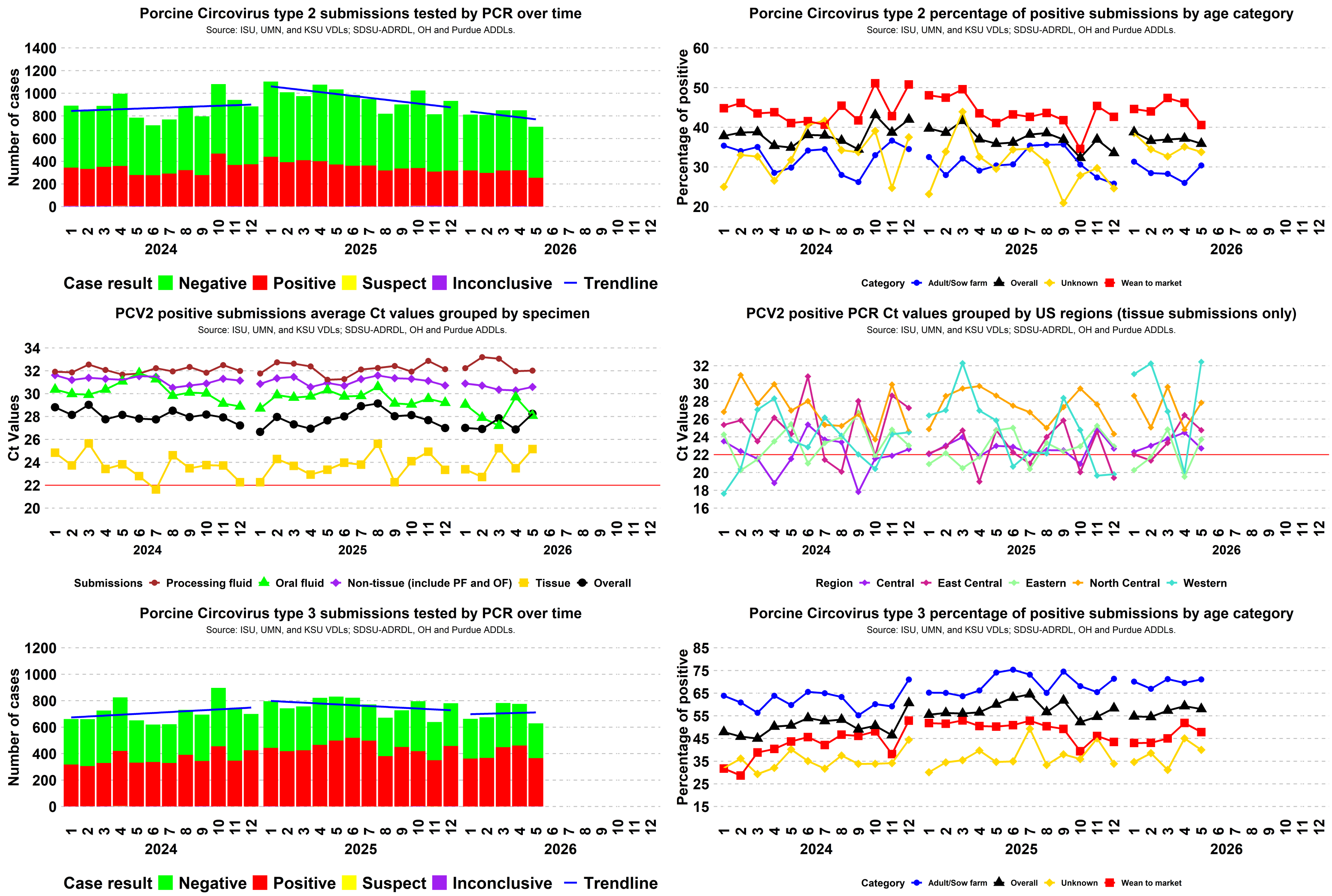


Figure 1. Top: *Left*: Results of PCV2 PCR cases over time; *Right*: PCV2 PCR-positive results, by category over time. **Middle**: *Left*: Average Ct values of PCV2 submissions by specimen; *Right*: Average Ct values of PCV2 tissue submissions by U.S. region; Central (IA), East Central (IL, IN, MO and WI), Eastern (AL, AR, CT, DE, FL, GA, KY, LA, MA, ME, MD, MI, MS, NC, NH, NJ, NY, OH, PA, RI, SC, TN VA, VT and WA), North Central (MN, ND and SD), Western (AK, AZ, CA, CO, HI, ID, KS, MT, NM, NV, OK, OR, TX, UT, WA and WY). Red line represent Ct threshold calculated using methodology based on Dx codes. **Bottom** *Left*: Results of PCV3 PCR cases over time; *Right*: PCV3 PCR-positive results, by category over time.

SDRS Advisory Group highlights:

- Overall, 35.89% of 705 cases tested PCV2-positive in May, similar to 37.18% of 850 in April.
  - Positivity in the adult/sow category in May was 30.4% (83 of 273), a moderate increase from 25.99% (85 of 327) in April.
  - Positivity in the wean-to-market category in May was 40.56% (144 of 355), a substantial decrease from 46.15% (198 of 429) in April.
  - In the month of May, the regions with the lowest PCV2 average Ct values in tissue submissions were Central (36 submissions; average Ct 22.7), Eastern (15 submissions; average Ct 23.7), East Central (14 submissions; average Ct 24.8), North Central (23 submissions; average Ct 27.8), and Western (8 submissions; average Ct 32.4).
- Overall, 58.03% of 629 cases tested PCV3-positive in May, similar to 59.28% of 776 in April.
  - Positivity in the adult/sow category in May was 71.1% (214 of 301), similar to 69.53% (251 of 361) in April.
  - Positivity in the wean-to-market category in May was 47.83% (121 of 253), a moderate decrease from 51.85% (168 of 324) in April.

Topic 5 – Detection of Influenza A Virus (IAV) RNA by RT-PCR.

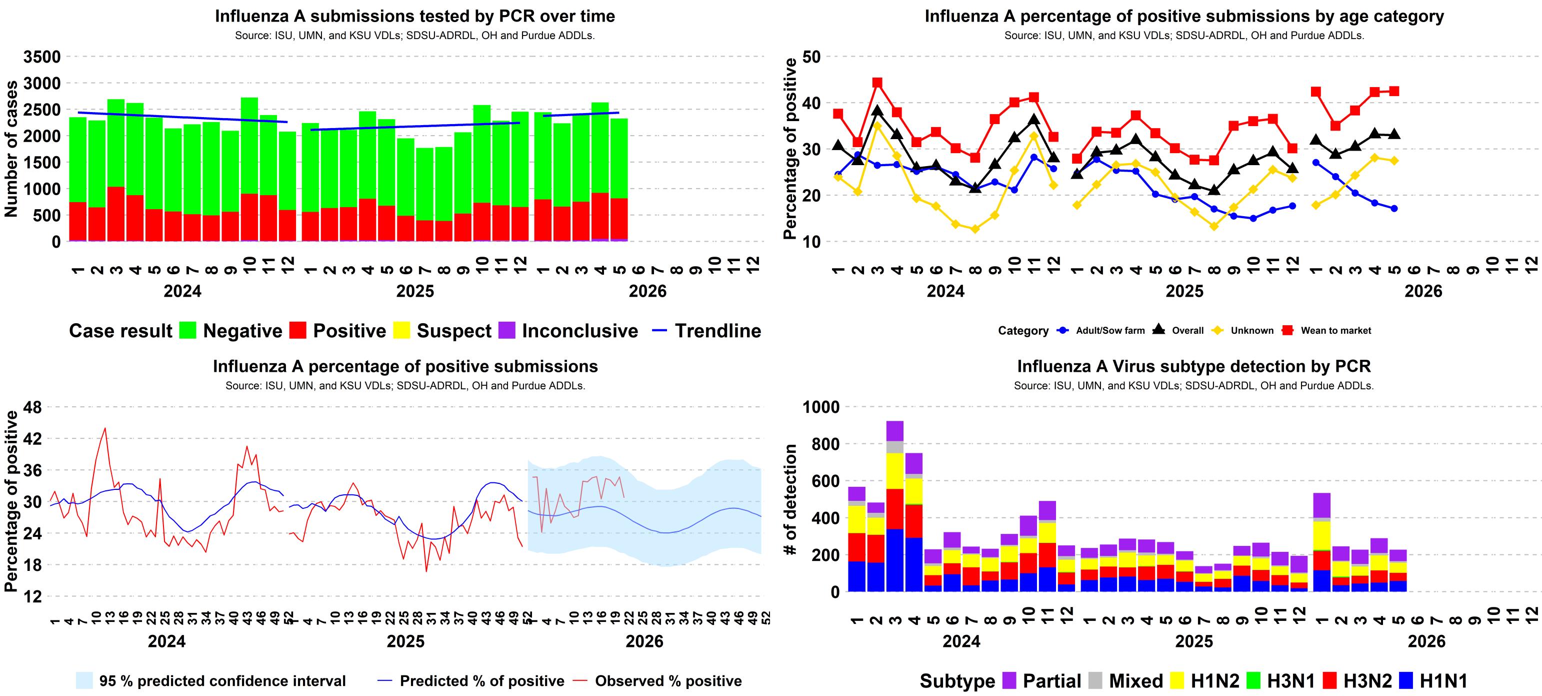
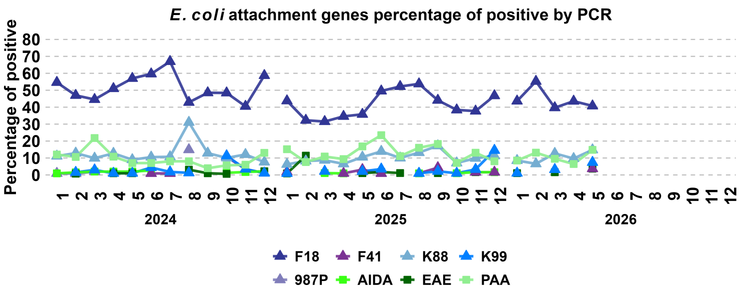


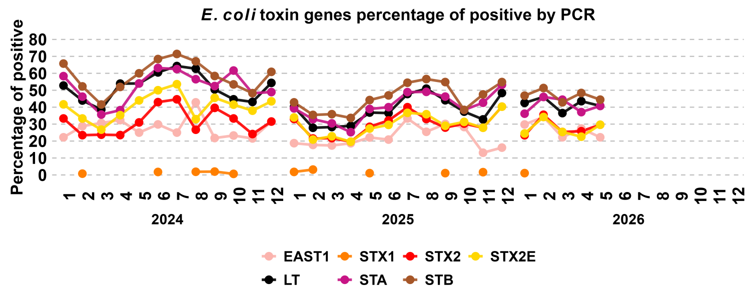
Figure 1. Top: *Left* Results of IAV PCR cases over time. *Right* Percentage of IAV PCR-positive results, by category over time. **Bottom:** *Left* expected percentage of positive results for IAV by PCR and 95% confidence interval for 2026 predicted value, based on weekly data observed in the previous 4 years. *Right* Number of IAV subtyping PCR detection over time; (Partial - only hemagglutinin or neuraminidase region detected; Mixed - 3 or more haemagglutinin and neuroamnidase regions detected. i.e., "H1 H3 N1").

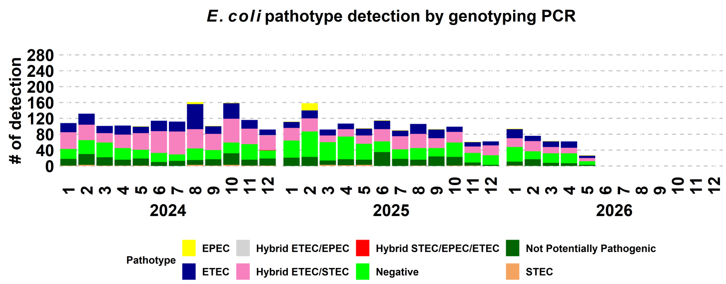
SDRS Advisory Group highlights:

- Overall, 32.96% of 2,324 cases tested IAV-positive in May, similar to 33.11% of 2,628 in April.
  - Positivity in the adult/sow category in May was 17.15% (89 of 519), similar to 18.34% (106 of 578) in April.
  - Positivity in the wean-to-market category in May was 42.47% (513 of 1,208), similar to 42.3% (560 of 1,324) in April.
  - Overall IAV-percentage of positive cases was 3 standard deviations above state-specific baseline in IA, OH and NC.
- Overall, 3.96% of 227 samples had mixed subtype detection in May, similar to 4.5% of 289 in April.

Topic 6 – Detection of *E. coli* DNA by Genotyping PCR.







Most frequent *E. coli* virotypes detected by State in 2026

Source: ISU, UMN, and KSU VDLs; SDSU-ADRDL, OH and Purdue ADDLs.

SiteState	First Most Frequent	Second Most Frequent	Third Most Frequent
IA	F18;LT;STa;STb;Stx2e - 32	F18;Paa;EAST1 - 11	EAST1 - 10
IL	F18;LT;STa;STb;Stx2e - 4	F18;EAST1;LT;STb;Stx2e - 1	F18;LT;Stx2e - 1
IN	F18;LT;STa;STb;Stx2e - 6	F18;EAST1;LT;STb - 3	
KS	F18;EAST1;LT;STa;STb - 1		
MN	F18;LT;STa;STb;Stx2e - 9	K88;Paa;EAST1;LT;STa;STb - 4	K88;EAST1;LT;STb - 2
MO	F18;LT;STa;STb;Stx2e - 4	K88;STa;STb - 2	EAST1 - 1
NC	F18 - 2	F18;EAST1;LT;STa;STb - 2	F18;EAST1;LT;STb - 2
NE	F18;LT;STa;STb;Stx2e - 6	K88;STa;STb - 2	F18;EAST1;LT;STa;STb - 1
OH	Eae - 1	F18;LT;STa;STb - 1	F18;LT;STa;STb;Stx2e - 1
SD	K88;STa;STb - 2	F18;LT;STa;STb;Stx2e - 1	F18;Paa;EAST1 - 1

Figure 1. Top: *Left E. coli* PCR-Positive results by attachment genes over time. *Right E. coli* PCR-Positive results by toxin genes over time. **Bottom:** *Left E. coli* number of samples tested by PCR genotype and their respective pathotype classification. *Right* Most frequent detected *E. coli* virotype by PCR along with their respective detection counts in 2026 at U.S. state level (color code on table cells associated with the pathotype legend).

Education Material:

- Click on the links here to access the *E. coli* PCR Genotyping Interpretation Tool
- **Attachment genes: Fimbriae** – F18, K88(F4), K99(F5), 987P(F6), F41; **Adhesins** – EAE (Intimin), PAA, AIDA
- **Toxin genes: Heat-labile** – LT; **Heat-stable** – STa and STb; **Shiga toxins** – Stx1, Stx2 and Stx2e; and EAST1
- **Enterotoxigenic *E. coli* (ETEC):** Has fimbriae and toxin (not Stx2e) genes. Associated with neonatal and post-weaning diarrhea
- **Shiga toxin-producing *E. coli* (STEC):** Has fimbriae (F18) and toxin (must be Stx2e) gene. Associated with edema disease
- **Enteropathogenic *E. coli* (EPEC):** Presence of the EAE (Intimin) adhesin
- **Hybrids (ETEC/STEC, ETEC/EPEC, STEC/EPEC, ETEC/STEC/EPEC):** Combination of characteristics of more than one pathotype

SDRS Advisory Group highlights:

- Overall, 27 samples were tested for *E. coli* PCR in May.
  - In May, the *E. coli* pathotypes with higher number of sample detections were Hybrid ETEC/STEC (8 detections), ETEC (6 detections), and Not Potentially Pathogenic (3 detections).
  - In May, the *E. coli* attachment genes with higher detection rate were F18 (40.74%), K88 (14.81%), and PAA (14.81%).
  - In May, the *E. coli* toxin genes with higher detection rate were STB (44.44%), LT (40.74%), and STA (40.74%).

Topic 7 – Confirmed tissue cases etiologic/disease diagnosis at the ISU-VDL and OH-VDL

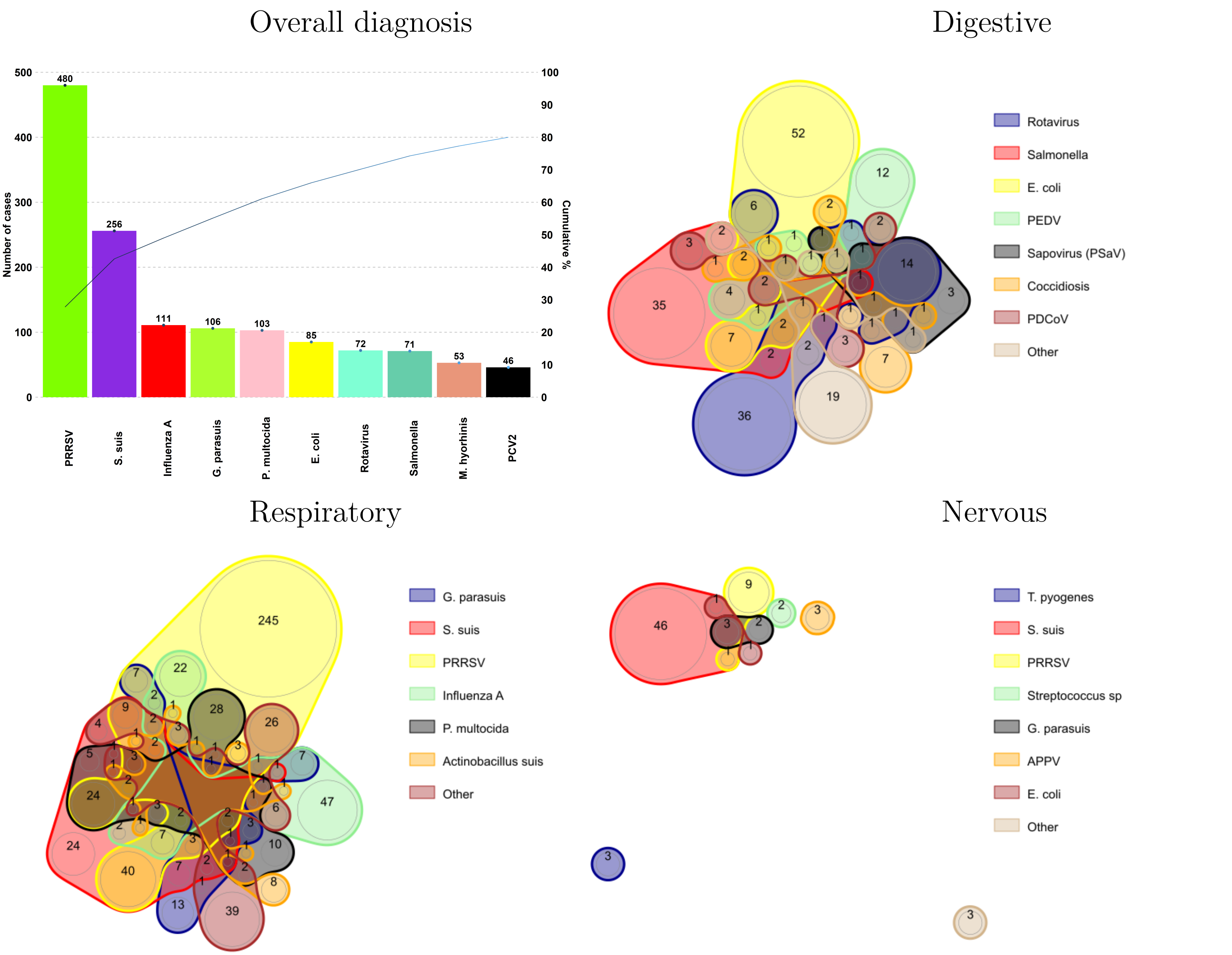


Figure 4. ISU-VDL and OH-VDL most frequent overall confirmed tissue disease diagnosis. The presented system is described in the title of the chart. Colors represent one agent; line intersections present diagnosis of 2 or more agents within a submission. Only the most frequent etiology/disease are presented. Less frequent etiology/disease are grouped as "other". Non-confirmed diagnoses are not presented. This work is made possible due to the commitment and teamwork from the ISU-VDL diagnosticians who assign standardized diagnostic codes to each case submitted for histopathology: Drs. Almeida, Burrough, Derscheid, Gauger, Magstadt, Piñeyro, Siepker, Madson, Thomas, Gris, Yanez and previous VDL diagnosticians who have contributed to this process.

Note: Disease diagnosis takes 1 to 2 weeks to be performed. The graphs and analysis contain data from April 01, 2026 to May 27, 2026

SDRS Advisory Group highlights:

- PRRSV (480) led cases with confirmed etiology, followed by *S. suis* (256), and Influenza A (111). PRRSV (438 of 989) led the number of confirmed respiratory diagnoses, *E. coli* (79 of 325) lead the number of confirmed digestive diagnoses, and *S. suis* (51 of 79) led the number of confirmed neurological diagnoses.

Note: *The SDRS is a collaborative project among multiple VDLs in the US swine industry. The VDL collaborators and industry partners are all invited to submit content to share on this bonus page related to disease prevention, control, and management. Stay tuned for more content in future editions.*

100 Editions of SDRS: A Collaborative Framework for U.S. Swine Health

Q. Le[1], R. Main[1], H. Naikare[2], F. Matias Ferreyra[3], A. Pillatzki[4], M. Prarat[5], C. Bowen[6], W. Baumgartner[7], D. Linhares[1], G. Trevisan[1]

[1]Iowa State University; [2]University of Minnesota; [3]Kansas State University; [4]South Dakota State University; [5]Ohio Animal Disease and Diagnostic Lab; [6]Purdue Animal Disease and Diagnostic Laboratory; [7]Illinois Veterinary Diagnostic Laboratory

I. Introduction: Celebrating a milestone

The **100th Edition** of the Swine Disease Reporting System (SDRS) marks a meaningful milestone across its written reports, podcast discussions, and video updates. More than a number, this moment reflects **years of steady collaboration and shared effort** among veterinary diagnostic laboratories, veterinarians, producers, and industry partners who value timely, standardized disease information. Since its launch in **2018**, SDRS has developed gradually, guided by **industry needs, feedback, and practical use in the field**. This milestone provides an opportunity to reflect on **how SDRS has evolved, how it is used today, and how it continues to support preparedness and informed decision-making** across U.S. swine production.

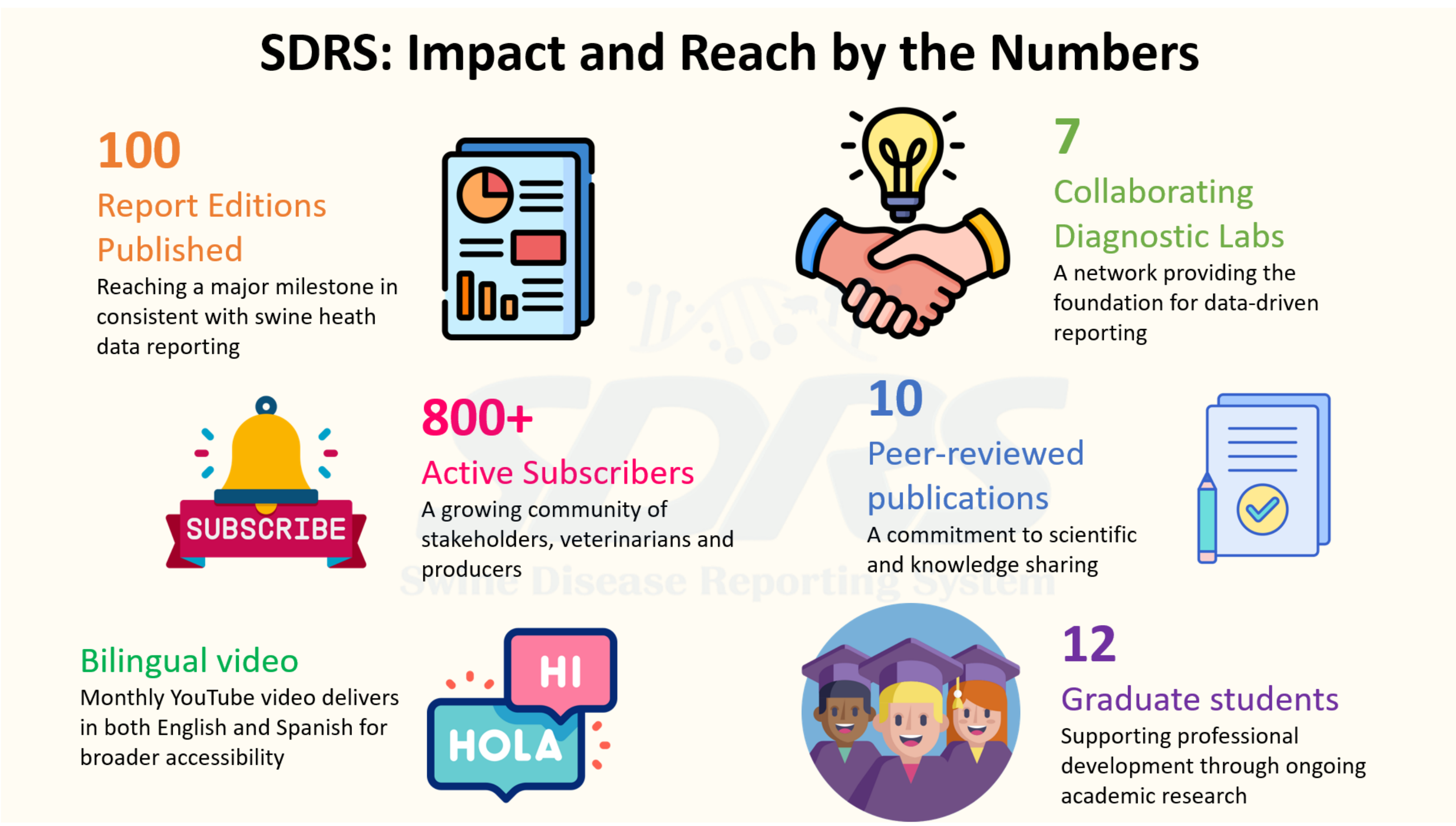


Figure 1. SDRS Impact and Reach: Key metrics

From early surveillance to a shared resource (2018-2025)

SDRS began with a focused goal: **to provide consistent, near real time reporting of the activity of key swine pathogens** using routinely generated diagnostic data. Early efforts centered on aggregated polymerase chain reaction (PCR)-based testing results for the molecular detection of **PRRSV, PEDV, PDCoV, and TGEV** from the **Iowa State University** and **University of Minnesota**'s respective VDLs, and PRRSV ORF5 sequencing data from the ISU-VDL. The later inclusion of **confirmed tissue diagnoses** helped inform not only pathogen detection but also disease occurrence.

As participation expanded, so did the system's scope having **other laboratories** joining the project early on, creating a multi-institutional collaborative framework. Yet in 2018, **Kansas State** Veterinary Diagnostic Laboratory and the **South Dakota** Animal Disease Research and Diagnostic Laboratory joined the program. Between **2022 and 2023**, SDRS incorporated **additional PCR targets – IAV, PCV2, and PCV3** and began integrating contributions from the **Ohio** VDL and **Purdue University** Animal Disease Diagnostic Laboratory. By **2024**, participation from **all collaborating laboratories** enabled **national scale PRRSV ORF5 surveillance**, while **2025** added further analytical depth through tools such as **E. coli PCR genotyping**. Expansion of diagnostic laboratory participation is ongoing to include **Illinois VDL**, further strengthening **geographic representation** and the **continuity of diagnostic data across regions** (Figure 2).

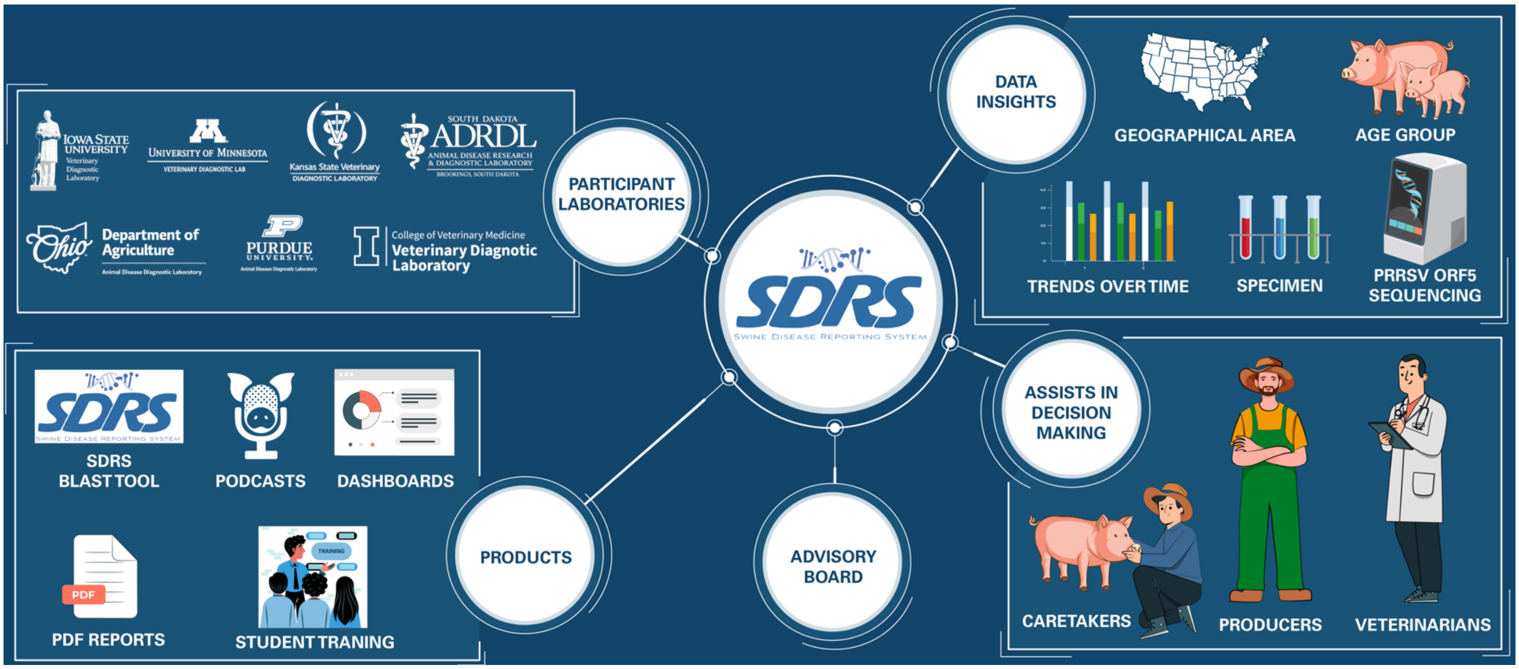


Figure 2. SDRS Overarching infrastructure overview

Alongside these technical developments, SDRS steadily expanded its reach. What began with **43 Monthly report subscribers and email recipients in 2018** has grown to **more than 800 in April 2026**, including veterinarians, producers, diagnosticians, and industry partners. This growth reflects **routine use of the system as a shared reference point** for understanding disease activity across production systems. SDRS outputs are distributed through the **Swine Health Information Center (SHIC)** and the **American Association of Swine Veterinarians** newsletters. In 2025, SDRS was the **most frequently accessed resource** for swine health information on the SHIC webpage.

II. Recent and ongoing development

Recent and ongoing development has focused on **improving access, clarity, and interpretability** of SDRS information. Enhancements include **expanded PDF reporting, online dashboards**, and the addition of **PRRSV 2 variant summaries**. Monthly video updates with **English and Spanish captions** provide an additional way to engage with surveillance findings.

SDRS has also broadened the scope of data available for interpretation. This includes integration of **E. coli PCR genotyping data** with web based classification and benchmarking, inclusion of **confirmed disease diagnoses from OH-VDL**, development of a **disease index ranking**, and **exploratory outbreak detection modeling**. Efforts are underway to add another layer of information from the **submission level to the sample level**, improving consistency and flexibility for future analyses. Building on these capabilities, ongoing analytical work includes evaluation of **PEDV and PDCoV regional co detection trends** and examination of the apparent **disappearance of TGEV**, supported through targeted funding.

Guidance from the **SDRS Advisory Group** continues to shape future priorities. Feedback has encouraged **further work on tracking PRRSV movement across states and clarifying which production categories may be driving strain dominance**, alongside progress toward an **industry-wide sequencing surveillance approach** that could help identify meaningful genomic shifts before widespread clinical signs are observed. Additional identified priorities include expanding **state-level PRRSV and PEDV reporting**, enhancing **PRRSV BLAST comparisons**, incorporating **PEDV sequencing**, and further exploring **syndromic surveillance informed by diagnostic and mortality data**.

Research, training, and engagement

While routine reporting remains central to SDRS, the data generated have also supported broader efforts in **research, education, and industry dialogue**. To date, SDRS data have contributed to **10 peer reviewed publications**, improving understanding of **population-level disease trends** and relationships across production phases.

SDRS also supports **workforce development** through student engagement in applied swine health analytics. The project has contributed to the completion of **2 MS, 3 PhD, and 1 MBA degrees** and is currently working with **3 MS and 3 PhD students**, helping build practical experience at the intersection of diagnostics, epidemiology, and decision making.

Industry engagement remains a core element. **Annual Winter Preparedness discussions** and **AASV-SDRS Advisory Group meetings** provide opportunities to collectively interpret emerging trends. Educational resources – including **written reports, podcasts, and video updates** – are designed to support **data literacy and informed discussion**, rather than prescriptive recommendations.

Practical value in the field

The **practical value of SDRS** becomes most apparent when diagnostic information is viewed **in context rather than in isolation**. By bringing together routinely generated data from multiple laboratories, SDRS helps place individual observations within a **broader regional and temporal perspective**, allowing comparisons across regions, production phases, and seasons.

From a strategic and systems perspective, **Dr. Dustin Oedekoven, Chief Veterinarian at National Pork Board**, highlights the value of SDRS in **providing timely, credible data that supports science based decision making across swine health and production systems**. Ongoing monitoring of endemic pathogens strengthens industry awareness by helping detect meaningful shifts in **prevalence, strain dynamics, and regional disease activity** as they emerge. He also emphasizes how SDRS improves communication with stakeholders by offering **clear, data driven insights**, and how the consistency of longitudinal reporting supports **strategic planning and informed allocation of resources** over time.

Reflecting more broadly on the system itself, **Dr. Rodger Main, Director of the Iowa State University Veterinary Diagnostic Laboratory**, notes the significance of how SDRS has evolved. He describes it as a **first-of-its-kind effort** that seamlessly integrates diagnostic information from laboratories across the country to provide a **near real-time view of megatrends in swine health related matters of high consequence to the U.S. pork industry**. To him, what has been most impressive has been the **highly collaborative nature of the initiative**, with members of the greater U.S. pork industry community coming together to participate in and support the SDRS effort as it continues to grow.

From the diagnostic laboratory perspective, **Dr. Angela Pillatzki, department head and director of South Dakota Animal Disease Research and Diagnostic Laboratory**, highlights how these same data support day to day diagnostic work. She notes that **SDRS reports provide up to date information on disease trends**, which can assist laboratory personnel when consulting with clients about testing needs. **The integration of clinician input** offers additional context around clinical presentation, which can be particularly valuable when interpreting **challenging diagnostic cases**. In addition, **information on genetic variability of selected disease agents** helps inform the development of diagnostic testing and guide research efforts aimed at better serving client needs.

Building on this broader view, **Dr. Rebecca Robbins, PIC Health Assurance Veterinarian**, describes SDRS as an **"early warning system" that meaningfully aggregates big data**. She notes that the modern swine veterinarian has moved beyond individual case management to looking for **sophisticated summaries of big data**, with SDRS providing **near real time insight into pathogen activity**, including PRRSV and IAV, allowing earlier recognition of **emerging regional or seasonal disease shifts** that inform proactive herd health decisions. She also highlights **enhanced communication and reporting while protecting clinic and producer anonymity**, noting that SDRS strengthens discussions with producers, system leadership, and industry stakeholders by grounding recommendations in **standardized, aggregated surveillance data**.

Dr. Paul Yeske, a Senior Veterinarian at Swine Vet Center, also highlights the value of SDRS in **consolidating diagnostic data to better understand what is circulating, when it is moving, where it is moving, and in which populations**. He notes that SDRS has made it possible to **document trends that were previously only assumed**, such as wean to finish populations turning positive for PRRSV ahead of sow farms. The ability to **follow these patterns over time on a month to month basis** provides a clearer picture of industry disease activity. He emphasizes that this information supports **comparison with local observations**, helps guide conversations with clients, and reinforces the importance of **biosecurity planning and risk awareness**. In his view, SDRS is valuable as an ongoing source of information that helps practitioners **continuously learn from industry trends and apply that understanding in practice**.

For **Dr. Daniel Boykin, Senior Veterinarian at Smithfield Foods**, this broader view supports understanding disease trends across systems. He highlights how **automatic capture of diagnostic results** reduces lag and potential bias, while **clear charts and graphs** improve communication with production staff. Historical data help illustrate **seasonality in disease transmission**, reinforcing awareness around biosecurity during higher risk periods, and **technical bulletins** provide useful scientific context for interpreting trends.

Extending this perspective, **Dr. Brigitte Davenport, Director of Sow (Indiana Region) at Country View Family Farms**, says SDRS data allows them to **compare national- and regional- pathogen activity to those observed internally**. She also highlights the value of **diverse perspectives** and **the opportunity to connect with others across the industry**. Together, these aspects help place observed disease patterns in the context of broader industry trends.

That ability to explain and contextualize disease risk resonates with **Dr. William Hollis, a partner in Carthage Veterinary Services and President of Professional Swine Management**, who emphasizes the importance of a **consistent framework** for discussing industry level challenges such as PRRSV and PEDV. He describes how recent disease activity has reinforced continued attention to biosecurity and how distinguishing diagnostic patterns between **sow herds and growing pigs** has supported ongoing evaluation of **wean-to-market and transport biosecurity** practices. Clear, well designed visuals, he notes, help translate complex data into meaningful discussion.

Rather than prescribing actions, SDRS is frequently used as a tool for **structured reflection. Dr. Thomas Petznick, a private-practice swine veterinarian based in Omaha, Nebraska**, describes the system as a way to turn surveillance data into actionable information by interpreting trends in context. Reviewing patterns encourages **epidemiological reasoning** – asking why activity may be changing, how it compares with historical experience, and whether known risk factors such as **feed, transport, labor structure, or regional disease pressure** may be contributing. In doing so, SDRS supports improved **regional situational awareness** and helps highlight drivers of disease spread.

That longer-term context is also emphasized by **industry leaders involved in production optimization and academic research**, who points to the value of SDRS in **quantifying disease incidence relative to previous time periods**. He describes the reports as providing **baseline reference points** across multiple pathogens that can be revisited as conditions change. When disease activity shifts outside **expected seasonal patterns**, this ability to look backward as well as forward helps frame conversations about what those changes may indicate for **future prevalence and incidence**.

Building on that longer term context, **Dr. Lauren Glowzenski, a veterinarian at Pipestone Veterinary Services**, describes how SDRS supports practical communication and decision making in day to day work. She notes that the **summaries and graphics provided by SDRS are valuable for explaining industry trends to a wide audience**, including producers and caretakers. The **monthly SDRS publication** serves as a quick and trusted reference that veterinarians can cite when discussing diseases impacting production systems. Because SDRS provides **near real-time summaries of major swine diseases affecting the U.S. commercial industry**, it offers timely insight into current disease pressure. When major diseases such as PRRSV, PEDV, or PDCoV are detected, Dr. Glowzenski relies on **graphical summaries from the most recent SDRS report** to help place those observations within the broader industry context. She also describes using SDRS to recognize when otherwise predictable viral disease trends behave atypically – information that has guided **different medical and business decisions** – and to explain regional PRRSV pressure and strain patterns to clients. In her experience, SDRS has become a **trusted source of concise, relevant information** that supports informed decision making across the industry.

Over time, this **shared awareness** supports a shift from reacting to outbreaks toward **anticipating risk**. By reconnecting current disease trends with lessons from past outbreaks, SDRS encourages **ongoing review of on farm practices** and helps keep **biosecurity efforts aligned with evolving conditions**. Its role is not to replace experience in the field, but to **add context and perspective** – providing a **broader view** that supports day-to-day decisions.

That broader view has also been applied beyond the field. SDRS data have been used by the **U.S. Department of Agriculture pork and hogs reporting** to help contextualize production outcomes alongside disease pressure, including elevated PRRSV detection in wean to market category. Separately, SDRS identified patterns of disease dynamics and the importance of grow-to-market to sustain higher pathogen detection and influence the dynamics in sow farms, informed discussion within SHIC and contributed to support a $2.3 million competitive research call focused on improving biosecurity in wean-to-harvest, highlighting how surveillance data can help guide coordinated industry responses.

Built together, moving forward

As SDRS moves beyond its one hundredth episode, the system continues to evolve carefully, guided by **advisory input, collaboration, and available resources**. Ongoing efforts focus on improving data structure, expanding analytical capacity, and strengthening partnerships across diagnostic laboratories.

This milestone reflects the **collective contributions** of many individuals and organizations who share data, expertise, and perspective. SDRS remains a **collaborative platform**, supporting the national swine industry with real-time animal health information, and its continued value depends on ongoing participation and engagement from the broader swine health community.