

Season 4, Episode 10: Swine Disease Reporting System

Dr. Giovanni Trevisan, Dr. Daniel Linhares, and Dr. Guilherme Cezar, Iowa State University, discuss the Swine Disease Reporting System, research this team is conducting on SDRS, tools that are available for veterinarians and producers on this matter, and so much more.

SDRS

The Swine Disease Reporting System, also known as SDRS, is funded by the Swine Health Information Center (SHIC). The SDRS foundation was built by an interdisciplinary team that focused on collaboration efforts to provide a database for producers, veterinarians, and others to consistently explore the real-time monitoring of swine endemic pathogen detection and swine diseases. The SDRS began by only monitoring PRRS virus detection by PCR but has now evolved to monitoring the detection of several different viruses and bacteria. Dr. Giovanni Trevisan and Dr. Daniel Linhares were the two individuals who helped bring the team together to develop what we now know as the SDRS.

How it works

The SDRS works by collaborating with participant veterinary diagnostic labs that share anonymized diagnostic test results with the SDRS. The participant labs ensure data confidentiality by not disclosing premise ID, producer, working veterinarian, or any other confidential information to the SDRS. The SDRS utilizes an Advisory Board, which is composed of producers and veterinarians to provide “boots on ground” comments. The Advisory Board reviews and discusses each report to provide their perspectives and comments to help support potential reasons for particular changes in pathogen detection or disease diagnosis. The SDRS then compiles all of the data, including diagnostic findings, and comments to create a report to be disseminated.

Sequencing and Disease Diagnosis

PRRSV ORF5 sequencing information is also available via the SDRS. A recently released tool allows producers and veterinarians to enter their one sequence and identify within the database if a similar sequence has been seen. It provides when, where, and what the RFLP and lineage was for the sequence. This report confirms ISU VDL diagnostic codes using complete tissue evaluation. This information goes beyond PCR detection results and brings the audience a complete picture of the disease identified by the ISU VDL diagnosticians.

Tools

Many tools are utilized to communicate the information that is found in each monthly report. The SDRS creates easy to read PDF reports and keeps an updated, real-time online dashboard, documenting activity of detection for all the pathogens tested. Podcasts and YouTube videos are other tools available that can be accessed by stakeholders for education on current activity about pathogen detection. The online dashboard has the ability to be filtered further by farm type and specimen type. Producers can also subscribe to have the monthly reports emailed to them directly.

SDRS website: <https://fieldepi.org/sdrs/>

To Listen to this full podcast please visit: <https://globalagnetwork.com/pigx/podcast/season-4-episode-10-swine-disease-reporting-system>

