

P029

Risk analysis tool developed to assist with decision-making on prevention of swine diseases. Application to Porcine Epidemic Diarrhea in Caribbean countries.

Maria Irian Percedo Abreu¹, Jordi Casal², Javier Guitian³, Cristobal Zepeda⁴, Victor Gongora⁵, Gillian Ellis⁶, Maria Teresa Frias⁷, Ana Alba Casals², Francisco Calvo⁸, **Jennifer Pradel**⁹, ¹CENSA, Mayabeque, Cuba; ²CRESA, Barcelona, Spain; ³RVC, London, United Kingdom; ⁴USDA-APHIS-IS, Mexico, Mexico; ⁵Belize Poultry Association, San Ignacio, Belize; ⁶Ministry of Agriculture and Fisheries, Kingston, Jamaica; ⁷CENSA, Mayabeque, Cuba; ⁸Avia GIS, Zoersel, Belgium; ⁹CIRAD, Petit Bourg, Guadeloupe. Contact: jennifer.pradel@cirad.fr

Purpose

Classical Swine Fever (CSF) and Teschovirus Encephalomyelitis (TE) have been identified as priority diseases for the Caribbean because of their sanitary, economic and social repercussions in affected countries, together with their high diffusion potential. After the emergence of Porcine Epidemic Diarrhea (PED) in the USA in 2013 and its further dissemination to other countries in the Americas and the Dominican Republic, the Steering Committee of the Caribbean Animal Health Network (CaribVET) added PED as a new priority for the region. This work aimed to develop a tool for risk analysis (RA) of swine diseases introduction/dissemination at national levels and applicable to the Caribbean region.

Method

This tool was initially developed for CSF and TE, and revised and adapted in 2015 for PED. The trilingual tool is a user friendly Excel Spreadsheet including the guidelines and questions for the risk assessment, are divided in three sections: 1) Release assessment of the pathogen from the affected country, 2) Exposure (dissemination) assessment of the susceptible pig population and 3) Consequences assessment of the pathogen introduction.

Results

A flexible RA tool has been designed. In section 1, the disease situation of the affected country and routes of pathogens introduction in the exposed country are considered. In section 2, the sanitary vulnerability in the exposed country is analyzed (control in external quarantine, performance of surveillance and diagnostic system, structure of the swine industry). Section 3 includes assessment of potential disease impacts in different swine production sectors. Values of scores for each criterion have been defined by an expert group for the disease being evaluated and the tool has been tested and validated in two Caribbean countries at risk.

Conclusion

Harmonization of sanitary risk assessment at national levels contributes to improve regional prevention and control strategies.

Relevance

The use of this tool is expected to trigger communication of threats and vulnerability detected with all stakeholders involved in the swine industry and to facilitate decision-making process to solve the problems identified in the countries.