Presentation Abstract

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Presentation:	284 - Caribbean Veterinary Information System (C-VIS), a pilot GIS platform for regional Avian Influenza surveillance
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Abstract: Purpose: The Caribbean is a complex region particularly vulnerable for animal and zoonotic disease emergence and spread. Situated along migratory birds' flyways, the region is at high risk of Highly Pathogenic Avian Influenza (HPAI) strains introduction from North America, where HPAI emerged early 2015. This threat is important in the Caribbean, as poultry production is the most rapidly growing subsector, and some countries have the capacity to be self-sustaining in poultry meat production. Though animal health surveillance is implemented in the countries, the collection of georeferenced data, their management and their analysis is poorly developed, and not fit for epidemiological studies or risk mapping. We aim to provide the official veterinary services (VS) with tools to alleviate the lack of manpower, competence and databases as well as gaps in geographic detail, as evidenced by preliminary surveillance network assessments conducted in the region in 2008-12. The tools are developed along with the regional HPAI surveillance by the Caribbean Animal Health Network (CaribVET).
Methods: A Caribbean Veterinary Information System (C-VIS) is being developed to optimize collection and systematic organization of georeferenced data using smartphones or tablets, ensuring homogenous data collection and topographic integrity. It will use open source software such as KoboToolbox®, QGIS® and VECMAP ®. Online data storage and sharing will be provided by a GeoNetwork platform. An educational programme has been planned to increase basic knowledge on GIS through a monthly newsletter and the organization of regional workshops.
Results: A protocol has been developed to formalize the regional organization of the data collection, centralization, analysis and reporting at the regional level.
Conclusions: These tools will be integrated in the regional early warning systems for the surveillance of HPAI and other emerging diseases with a similar epidemiology, such as West Nile or Saint Louis encephalitis. It will also provide opportunities to develop the national GIS capacities.
Relevance: The technology and know-how can be transferred to other developing regions with limited resources.