

DOTTORATO DI RICERCA IN SCIENZE MEDICHE VETERINARIE XXXIII CICLO



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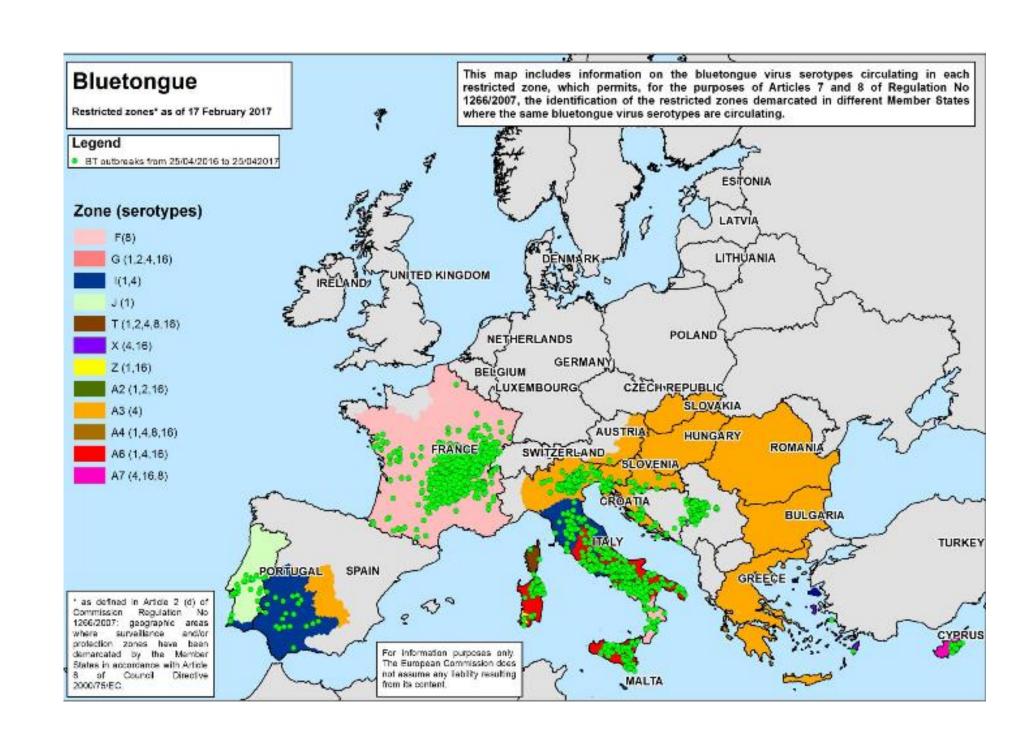
EMERGING RISKS AND ANIMAL HEALTH

The spread of exotic, emerging and re-emerging diseases, has become, in the last years, one of the most important threats to the animal productions and Public Health, representing a new challenge for the European Community (Rodrìguez Prieto *et al.*,2015). In a global-market framework, where trade and contacts between countries are simplified, effective and well-developed surveillance systems are necessary. Multiple factors are associated with the emergence of new, known or exotic diseases in this new economic panorama and for these reasons controls on animal imports, traceability and timeliness detection of infected animals should be considered the basis of a sound surveillance.

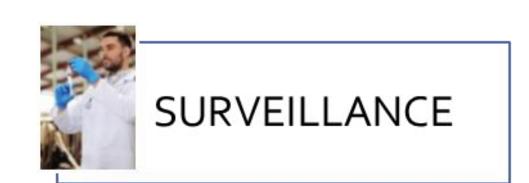
The aim of the study was to underline the crucial role of information that reach the Official Veterinarian (OV) at the slaughterhouse concerning the epidemiological situation of exporting countries in preventing future outbreaks.

BLUETONGUE IN EUROPE

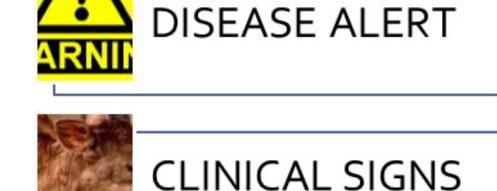
- ❖ Different introduction mechanisms including the movement of infected livestock, the passive movement of infected *Culicoides* on the wind and other possible routes
- New serotypes with unpredictable virulence and clinical implications
- Important impact on animal productions and trade
- Costs for surveillance and vaccination programmes (Wilson & Mellor, 2019)



Bluetongue outbreaks and restriction zones. Available at: https://ec.europa.eu/food/animals/animal-diseases/control-measures/bluetongue_en



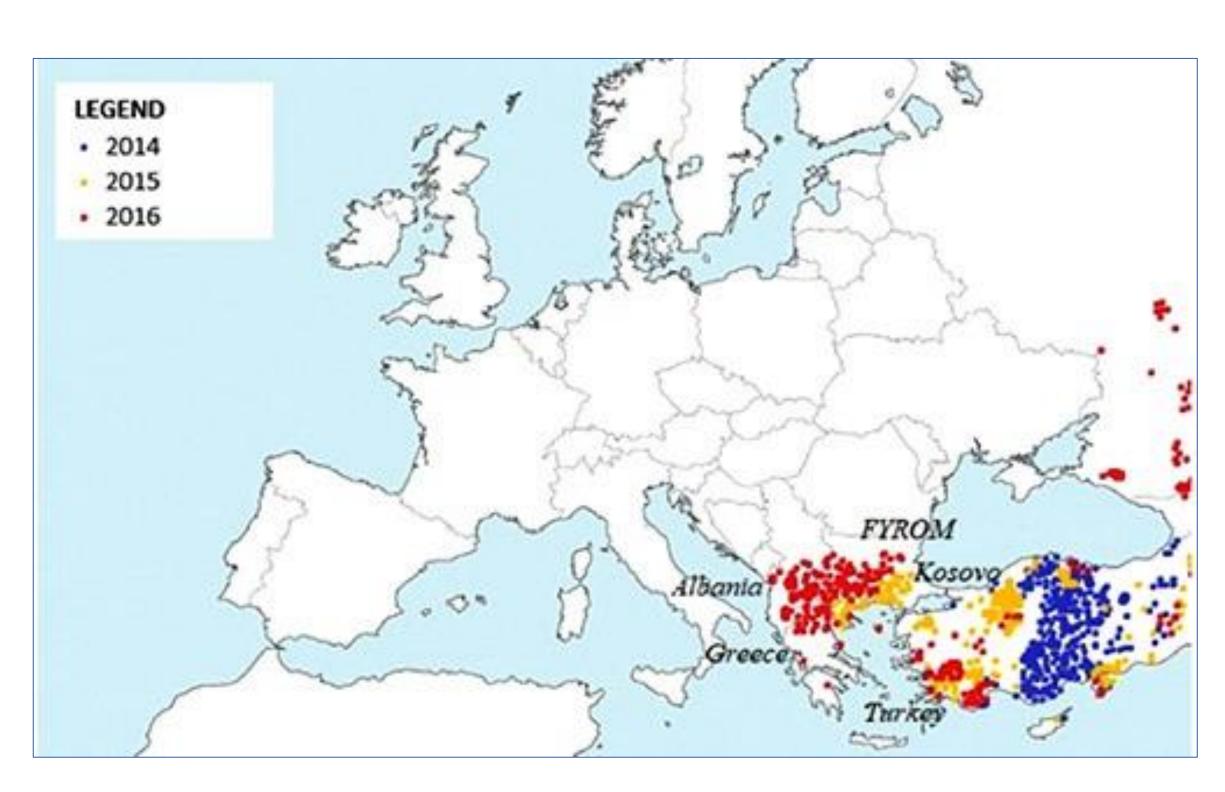






EVALUATION

LUMPY SKIN DISEASE



Lumpy Skin Disease outbreaks notified in Europe from 2014 to 2016 (Corradini *et al.*, 2018)

- Over 7.600 outbreaks registered, with 12.800 animals affected
- Most outbreaks between May and August
- ❖ Proximity to affected farms, warm temperatures and related vector abundance were the main risk factors for LSD spread (EFSA, 2017)

The *ante-mortem* inspection based on clinical signs evaluation is in fact a crucial phase of the monitoring process and permits to outline a differential diagnosis that can subsequently be confirmed by laboratory testing (Vågsholm, 2014). In the light of above, in case of movement of animals (or animal trade) between countries, the role of OV should be to control and examine each consignment of animals according to the epidemiological situation of the exporting country or, in case of national movement, of the origin region. A more detailed examination is extremely recommended in case of suspect of an emerging and re-emerging disease, considering their economic impact and veterinary public health implications.

References:

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