8th Annual EPIZONE meeting

23-25 September 2014

Copenhagen, Denmark

Posters
Intervention strategies and legislation

DTU Vet
National Veterinary Institute

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West Nile virus (WNV) is one of the most serious public health threats that Europe and the Mediterranean countries are currently facing. Following the first outbreak of West Nile disease (Tuscany, 1998), a national surveillance program supported by the Ministry of Health was established since 2002 in order to early identify WNV circulation. This multi-species surveillance planned to screen wild birds, sentinel-chickens, sentinel horses, equine neurological cases, mosquitoes and humans and blood donors. To tackle WNV continuous incursions, more comprehensive Regional surveillance programs are also carried out in WNV affected areas.

After the first WNV outbreak (lineage 1), WND apparently disappeared for almost ten years and it was newly detected in 2008. In the subsequent years, the number of cases increased in the Po river Valley. Until 2013, the Lombardia Region was only marginally involved in 2008 epidemic (2 human cases in Mantova Province). In fact, no other reports were described before the identification of WNV lineage 2 in a pool of *Cx. pipiens* sampled for experimental purposes in Cremona Province (July 5, 2013). Since just Mantova Province was at that time enclosed in the national plan, a regional program was designed to define prevention and control strategies for human health. Considering the role given to entomological and wild birds surveillance in WNV early detection, this plan aimed to improve these keys activities.

By placing 25 CO_2-CDC traps in 5 different Provinces of the southern part of the Region in the Po valley, a total of 147 capture sessions were done (July-October 2013). In addition, 632 wild birds of different species (*Pica pica, Corvus corone cornix, Streptopelia decaocto, Garrulus glandarius*) were sampled. PCR carried out on wild birds, led to identify 2 infected birds out of 632 tested (1 European magpies and 1 carrion crows). Within the entomological surveillance 7 pools of *Cx. pipiens* resulted PCR positive. In addition, passive and active surveillance on horses allowed to identifying 8 cases in 7 different farms. In the same period 18 cases of human WNV infection were diagnosed in the Lombardia Region. These results support the hypothesis that WND is becoming endemic in Po valley (northern Italy).

Therefore, the regional 2014 monitoring plan is implemented with a more comprehensive geographical distribution of the traps and a greater number of wild birds sampled. In particular, the plan territory of the region is split into 30 square areas of 20Km^2 and one trap is placed in each square, taking into account risk areas. Night trap sessions are programmed every 15 days from mid May to the end of September. The monitoring on wild birds is spatially and temporally improved in order to ensure a total of 155 wild birds sampled every month from April to September.

The 2014 surveillance program supported by the Lombardy Public Veterinarian Service represents an integrated surveillance aiming to early identification of WNV circulation. Having such a rapid health alarm system in place is of extreme value as it enables regional infrastructures for optimal management of acute human cases and adoption of prevention strategies.