





Integrated surveillance of West Nile and Usutu virus

Epidemiological report no. 2 29th June 2022 National data

- 1 In Evidence
- 2 Humans
- 3 Horses
- 4 Resident birds of target species
- 5 Wild birds
- 6 Entomological
- 7 Poultry
- 8 Usutu virus
- National Plan for Prevention, Surveillance and Response to Arbovirus 2020-2025.







This report summarizes the results of West Nile virus and the Usutu virus surveillance activities in Italy, updated to **28-6-2022**

- Since June 2022,,no confirmed cases of West Nile Virus (WNV) infection have been reported in Italy.
- Surveillance in mosquitoes, resident birds, wild birds, poultry and horses confirmed the circulation of WNV Lineage 2 in Veneto region.
- As of 22 June 2022, European Union (EU), European Economic Area (EEA) and EUneighbouring countries reported no human cases of West Nile virus (WNV) infection (Source: ECDC 2022).

Figure 1. Provinces where WNV has been detected in vectors, animals and humans (blood donor, fever and neuroinvasive cases)



Provinces with demonstrated West Nile Virus circulation in humans^a







Horses

No WND outbreaks have been confirmed in equids.





WN and Usutu virus integrate surveillance





Resident birds of target species

No WND outbreaks have been confirmed in resident birds belong to target species.

The target species for the surveillance are:

- Magpie (Pica pica)
- Carrion crow (Corvus corone cornix)
- Eurasian jay (Garrulus glandarius)









Wild birds

No WND outbreaks have been confirmed in wild birds.









Entomological surveillance

WNV genome has been reported in **1 mosquito pool** collected in **Veneto** region. The circulating strains belong to **Lineage 2**.

Region

VENETO

Total



Table 1 West Nile virus detection in mosquitoes-**2022**

Province

Vicenza

Total

1

1

Figure 2 Geographical distribution West Nile virus detection in mosquitoes - 2022

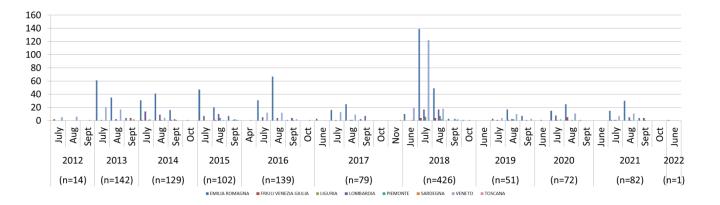


Figure 3 Spatio-temporal distribution West Nile virus detection in mosquitoes - 2022







Poultry surveillance

No WND outbreaks have been confirmed in poultry flocks.







8 USUTU virus surveillance

Usutu virus has been detected in 1 mosquitoes pool from Marche region.



Region	Province	Total
MARCHE	Macerata	1
Total	1	

Table 2 Usutu virus detection in mosquitoes -2022

Figure 4 Geographical distribution Usutu virus detection in birds and mosquitoes - **2022**







National Plan for Prevention, Surveillance and Response to Arbovirus 2020-2025

West Nile (WNV) and Usutu (USUV) viruses surveillance activities since 2020 are included in the National Plan for Prevention, Surveillance and Response to Arbovirus 2020-2025.

The Plan integrates in a unique document the surveillance measures to be implemented at the national level for autochthonous and imported arboviruses, promoting a multidisciplinary approach in the management of surveillance and control activities.

More details about the integrated surveillance plan are available on the complete document «National Plan for Prevention, Surveillance and Response to Arbovirus 2020-2025.»

National Human surveillance activities are coordinated by the National Institute of Health (Istituto Superiore di Sanità, ISS) and the Ministry of Health is responsible to provide surveillance data to the European Commission and to ECDC. Moreover regions can implement normative-programmatic documents for the epidemiological and laboratory surveillance on their territory according to National legislation and guidelines provided by the Ministry of Health .

Veterinary surveillance activities are coordinated by the National Reference Center for the exotic diseases of animals (CESME) which harmonize the diagnostic procedures within the network of IIZZSS national laboratories and confirms suspected specimens. CESME is also in charge for the veterinary surveillance data management, collection and communication to the Ministry of Health according to the data flow reported in the Plan.





Useful links

- Web page of National Institute of Health
- Web page of <u>Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise</u> "G. Caporale" (CESME)
- Directions of the <u>National Italian Blood Center</u>
- Directions of the National Italian Transplant Center
- Web page of the Italian Ministry of Health
- Web page of <u>ECDC</u>

The weekly report is prepared by:

A. Bella, G. Venturi, F. Riccardo – Department of Infectious diseases, ISS

F. Iapaolo, F. Monaco, P. Calistri – CESME, Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise.

We gratefully acknowledge the support from the personnel of the Regions and the Local Health Services for sampling and data collection, the National Italian Blood Center, the National Italian Transplant Center, the Italian network of the Istituti Zooprofilattici Sperimentali and the Italian Ministry of Health.