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National Disease Control Centre

Equine Disease Alert – West Nile Virus

Number 05 of 2020

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West Nile Virus

Outbreaks in Europe

France

- On 26th August 2020, France reported an outbreak on the island of Corsica. One horse was affected.

Germany

- Since 8th September there have been 6 outbreaks in the north east of the country.

Italy

- There have been 6 outbreaks in regions in Northern Italy. 1 fatality was recorded.

Portugal

- On 29th July, there was one outbreak in Central Portugal. One horse died. No others were affected.

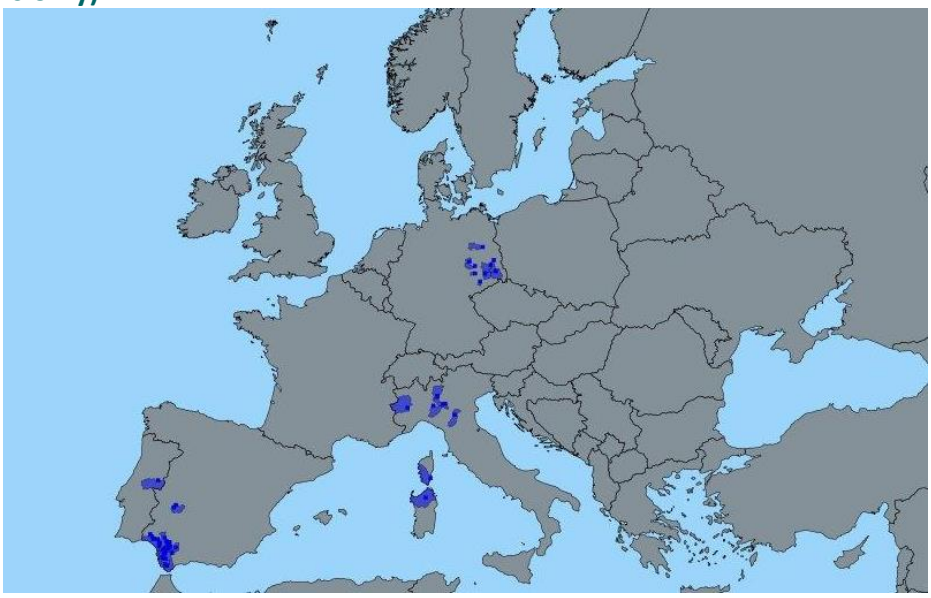
Spain

- From 8th August 2020 to date, there have been 50 outbreaks in horses in the provinces of Sevilla, Huelva and Cadiz in Andalucía and 1 outbreak on the island of Gibraltar. 2 of the affected horses were euthanized.

Netherlands

- On 16th September, The Netherlands reported its first outbreak of West Nile Virus in a grass sparrow. The bird was tested as part of the national surveillance program.

The map showing the distribution of West Nile Virus in Europe currently (equine outbreaks only)



Map courtesy European Commission

About West Nile Virus

- West Nile fever is a disease caused by West Nile Virus (WNV), which is a flavivirus related to the viruses that cause St. Louis encephalitis, Japanese encephalitis, and yellow fever.
- The virus was first isolated in Uganda in 1937.
- Since 1998, outbreaks of equine West Nile encephalitis have been reported from Italy, France, Spain, Germany and North America. Surveys in parts of Europe and the Middle East have shown that up to a third of horses tested have been exposed to the virus even in the absence of clinical disease.
- West Nile Virus causes disease in humans, horses, and several species of birds. However, the virus has an extremely broad host range and it can replicate in birds, reptiles, amphibians, mammals, mosquitoes and ticks.
- The reservoir of the virus is in birds. Mosquitoes become infected when they bite an infected bird ingesting the virus in the blood. The mosquitoes act as carriers (vectors) spreading the virus from an infected bird to other birds and to other animals.
- Many species of birds are resistant to the disease. Susceptible birds such as geese and crows show various degrees of neurologic involvement ranging from lying down to leg and wing paralysis. They are either reluctant or unable to move when disturbed and may be uncoordinated. Mortality rates of 20-60% have been reported in geese.
- Infection of other animals (e.g. horses, and humans) is incidental to the cycle in birds, since most mammals do not develop enough virus in the bloodstream to spread the disease.
- In horses, clinical signs of the neurologic disease caused by West Nile Virus may include loss of appetite, depression, stumbling, muscle twitching, partial paralysis, impaired vision, head pressing, teeth grinding, aimless wandering, convulsions, circling, and an inability to swallow. Weakness, usually in the hind limbs, is sometimes followed by paralysis. Coma and death may occur. Fever has been seen in some, but not all, cases.
- West Nile Fever is a serious public health risk. The virus is transferred by mosquitoes to humans. It takes 7 – 14 days for those bitten by infected mosquitoes to develop symptoms, including fever, headaches, weakness, joint and muscle pain, inflammation of the eyelid, rashes, and occasionally nausea and diarrhoea.
- Approximately 1% of people infected with West Nile Virus develop severe disease (encephalitis, meningitis, acute pancreatitis or hepatitis), which is fatal in some cases.
- There is no specific treatment other than supportive care.
- There is no human vaccine although one does exist for horses.

Risk to Ireland

- There has never been a case of West Nile Virus in Ireland.
- In 2010, the mosquito *Culex modestus* was detected in the UK for the first time since 1944. This mosquito species is the principle bridge vector (responsible for transmission between birds, horses and humans) for WNV in Southern Europe. This finding may increase the risk of WNV being transmitted in the UK and Ireland.
- DAFM will continue to monitor the situation and take appropriate action as required.

Further information on West Nile Virus:

DAFM website:
https://www.agriculture.gov.ie/animalhealthwelfare/diseasecontrol/westnilevirus/

Disease factsheet:
https://www.agriculture.gov.ie/media/migration/animalhealthwelfare/diseasecontrols/westnilevirus/FactSheetforWestNileVirus260319.doc

World Animal Health Organisation (OIE):
https://www.oie.int/en/animal-health-in-the-world/animal-diseases/West-Nile-fever/

Contact details for RVOs available at:
https://www.agriculture.gov.ie/contact/

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