

West Nile Virus

Background Information

West Nile virus infects birds and is spread to humans and horses via a bite from an infected mosquito. It often causes no symptoms or mild, flu-like symptoms, but can cause severe disease (known as West Nile fever, West Nile disease or West Nile Encephalitis).

Organism

West Nile virus (WNV) – an arbovirus

Incidence and Transmission

There have been no recorded cases of human WNV infection acquired in the UK.

WNV infects wild and domestic birds, often causing no disease symptoms. There have been no cases of WNV-infected birds in the UK, although there is some evidence to suggest that some UK birds may have been exposed to WNV. It is thought that migrating birds may introduce WNV to the UK in the future. WNV is found in some countries in mainland Europe.

Mosquitoes spread the disease to humans and horses. The mosquito becomes infected with WNV and then transmits the virus when they bite. The species of mosquito (*Culex*) which transmits WNV has been found in southern regions of the UK. It is likely that the effects of climate change will increase the spread of mosquitoes in the UK.

The disease tends to be seasonal, with most cases in Europe occurring during the summer.

There is no spread from person to person or from horse to person.

Occupations and processes where WNV may present a risk if it becomes present in the UK:

Occupational exposure to WNV may occur in those who:

- are exposed to infected mosquitoes.

Occupations where there may be a risk of occupationally acquired WNV include:

- nature conservancy workers;
- poultry farmers;
- bird keepers;
- zoo and bird park keepers; and

- veterinary surgeons.

Clinical Information

The incubation period is generally 3–15 days. Most infected people have no symptoms, while some have a mild flu-like illness with fever and headache. However, a small number of people develop encephalitis or meningitis, with symptoms including headache, fever, stiff neck, sore eyes, disorientation, muscle weakness, convulsions and sometimes coma. Occasionally the disease is fatal.

Anyone with these severe symptoms should seek medical attention.

There is no specific treatment available, but severe cases may require hospitalisation for supportive treatment.

Control

The following control measures reduce the risk of infection:

- Good occupational hygiene practices should be followed, especially washing with warm water and soap.
- Cuts and abrasions should be covered with waterproof plasters.
- Suitable protective clothing should be worn.
- A suitable disinfectant should be used.

Further Information

[Public Health England – West Nile Virus](#)

[NHS Choices – West Nile Virus](#)