

Transmission Cycle of the West Nile Virus

Mosquitoes of some species carry and amplify the virus—i.e., they are both vector and host.

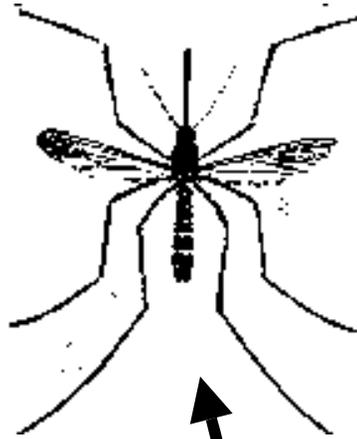
Mosquitoes

Mosquitoes transmit virus to birds when they bite to get a protein blood meal before laying each batch of eggs.

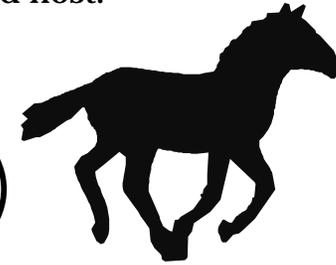
Typical WNV Transmission Cycle: Bird ↔ Mosquito

Birds

Infected birds can transmit virus to mosquitoes. Birds of some species get ill, die. Others become infected but do not show clinical symptoms of disease.



Occasionally WNV Infects Mammals Bitten by Infected Mosquitoes



Horses

Most infected mammals do not get ill. Some do, with encephalitis and muscle weakness.

People



Dead-End Hosts
Viremia in mammals is generally insufficient to transmit WNV back to mosquitoes