

Mosquitoes of West Virginia

Species listed have been collected by either WVDHHR/IDEP or collected in West Virginia by the person/institution noted. **Note:** *This is probably not a complete list and additional species may be added or removed in the future.*

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- ✦ *Aedes albopictus* (*Stegomyia albopicta*) – An Asian species first discovered in the United States in Texas in 1985. Found positive for West Nile virus in some states. LAC (La Crosse encephalitis), Chikungunya, Dengue and dog heartworm are also transmitted by this species. Container-breeder, loves tire piles, aggressive daytime biter, limited flight range.
- ✦ *Aedes cinereus* - found positive for West Nile virus in some states. This mosquito is known as an ankle biter because it usually focuses its feeding activities toward the lower extremities of the body. *(Collected by James Joy) (Collected by WVU).*
- ✦ *Aedes vexans* – found positive for West Nile virus in some states. Experimentally infected with several viruses including SLE (St. Louis encephalitis), EEE (Eastern Equine encephalitis), WEE (Western Equine encephalitis) and LAC. Known vector for dog heartworm (*Dirofilaria immitis*). Temporary waters of inland freshwater wetlands and wet woodlots, long-distance flyer, evening night biter.
- ✦ *Anopheles barberi* - found positive for West Nile virus in some states. Has demonstrated the ability to transmit *vivax* malaria under laboratory conditions. *(Collected by James Joy).*
- ✦ *Anopheles punctipennis* – found positive for West Nile virus in some states, not a natural vector of malaria although it may be infected in the laboratory.
- ✦ *Anopheles quadrimaculatus* - found positive for West Nile virus in some states. Has probably been responsible for the transmission of almost all human malaria that has occurred east of the Rocky Mountains. Possible vector of dog heartworm. *(Collected by James Joy).*
- ✦ *Coquillettidia perturbans* - found positive for West Nile virus in some states. This mosquito species is considered to be an important accessory vector responsible for the transmission of EEE from birds to humans and horses. *(Collected by James Joy) (Collected by WVU).*
- ✦ *Culex erraticus* - found positive for West Nile virus in some states. Adults are persistent and painful biters. *(Collected by James Joy).*

- * Culex pipiens - found positive for West Nile virus in some states, primary vector for SLE.
- * Culex restuans - found positive for West Nile virus in some states, occasionally found positive for EEE.
- * Culex salinarius - found positive for West Nile virus in some states. It is also an efficient vector for SLE. *(Collected by James Joy)*.
- * Culex territans - found positive for West Nile virus in some states. Feeds on cold blooded animals, does not bite humans
- * Culiseta inornata - found positive for West Nile virus in some states. Wild caught females have been known to carry WEE. Under laboratory conditions can carry Japanese B encephalitis. *(Collected by James Joy)* *(Collected by WVU)*.
- * Ochlerotatus abserratus – this species will readily attack man and can be a severe nuisance after dark. *(Collected by James Joy)*.
- * Ochlerotatus atropalpus - found positive for West Nile virus in some states, potential vector for La Crosse.
- * Ochlerotatus c. canadensis - found positive for West Nile virus in some states, vector for dog heartworm. Temporary woodland pools, long-lived, relatively limited flight range.
- * Ochlerotatus dorsalis – found in the “Little Blue” compound owned by First Energy Corporation in Hancock County. The compound is extremely alkaline in nature. Mass emergence occurred in May 2007.
- * Ochlerotatus hendersoni – Potential vector for dog heartworm. *(Collected by James Joy)*.
- * Ochlerotatus japonicus – An Asian species introduced in northeastern U.S. between 1992 and 1998. Found positive for West Nile virus in some states, potential vector for La Crosse. Container-breeder and in isolated standing waters.
- * Ochlerotatus sollicitans – found positive for West Nile virus in some states. This mosquito species is considered to be an important accessory vector responsible for the transmission of EEE from birds to humans and horses. Breeds in temporary waters (potholes), bites day/night, long distance flyer. *(Collected by James Joy)*.

- * Ochlerotatus sticticus - found positive for West Nile virus in some states. *(Collected by James Joy) (Collected by WVU).*
- * Ochlerotatus triseriatus - found positive for West Nile virus in some states, **primary vector for La Crosse**, potential vector of dog heartworm, efficient laboratory vector of EEE, WEE, VEE (Venezuelan Equine encephalitis) and yellow fever. Container-breeder, often in natural water-holding structures such as tree holes, laying eggs at the waterline or slightly above, readily breeds in tires and artificial containers.
- * Ochlerotatus trivittatus - found positive for West Nile virus in some states. Found positive for Snowshoe Hare virus in Pennsylvania. Possible vector of dog heartworm. *(Collected by James Joy) (Collected by WVU).*
- * Orthopodomyia signifera - found positive for West Nile virus in some states.
- * Psorophora ciliata - found positive for West Nile virus in some states.
- * Psorophora columbiae (confinnis) - found positive for West Nile virus in some states, other viruses isolated from this species include WEE and CE (California encephalitis)
- * Psorophora ferox - found positive for West Nile virus in some states, a persistent and painful biter.
- * Toxorhynchites r. septentrionalis – adults are nectar feeders and larvae are predatory on other mosquito larvae.
- * Uranotaenia sapphirina - found positive for West Nile virus in some states. No known medical or economic importance the adults are not known to feed on humans. *(Collected by James Joy).*

Bibliography

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