

NJ STATE MOSQUITO CONTROL COMMISSION

2011 VECTOR SURVEILLANCE GUIDELINES

Claudia O'Malley

Office of Mosquito Control Coordination

The following standards should be considered prior to sample submission.

1. The limit of 20 pools per county per week is for guidance only. If you need to submit more than 20 pools, please contact the Office of Mosquito Control Coordination.
2. If you would like to have samples tested for more than one pathogen (i.e. duplexing or triplexing), please contact the Office of Mosquito Control Coordination prior to submission.
3. The following mosquito species have little or no value as tested specimens for any pathogen, and should not be submitted:

Orthopodomyia alba

Orthopodomyia signifera

Toxorhynchites rutilus septentrionalis

Wyeomia smithii

4. The following mosquito species are of particular interest in the detection of Eastern Equine encephalitis:

Culiseta melanura

Aedes sollicitans

Coquillettidia perturbans

Aedes canadensis

Culex erraticus

Culex salinarius

Conversely, other *Culex sp.* do not have a great value in the detection of EEE.

5. For West Nile virus detection, the various *Culex sp.* are very important, but possible bridge vectors should also be submitted.
6. Regarding St. Louis encephalitis detection, again, *Culex sp.* are of primary importance. Additionally, the following areas should be considered as sites where mosquito populations capable of transmitting St. Louis encephalitis are likely to be found: the New York Metro, Philadelphia Metro, Suburban Corridor and Delaware River Basin regions. Also to be considered are polluted water habitats.
7. At present, the only species to be submitted for La Crosse encephalitis testing is *Aedes triseriatus*.
8. If you are uncertain where to do trapping, consider which parts of your county have a history of disease, or contain species of mosquitoes that can participate in the disease cycle.
If resources are limited, focus trapping efforts in areas of higher human population density.

9. Timing of submissions – the purpose of this testing is to determine if, and where, disease is present – and the results should be a factor in driving your control efforts. This work is not being done purely for research, its being done as part of an operational control program. To that end, it is important to submit specimens for testing in a timely fashion. Over the years, I have observed a good number of instances in which specimens were submitted 2 weeks, 3 weeks, 4 weeks, and even longer, after they were collected. These results are not doing any good as a tool to direct control.