

## David Gaines – Virginia Arboviral Surveillance, 2016

- a. Mosquito control programs
  - i. 12 jurisdictions have mosquito control programs
  - ii. Located in jurisdictions with high human populations
  - iii. Regional groups monthly during mosquito season
    - 1. All do WNV Surveillance
    - 2. Tidewater region does EEE surveillance as well
- b. Human endemic arboviral cases - 2016
  - i. WNV
    - 1. 8 cases
    - 2. 2 viral donors
  - ii. No SLE
  - iii. EEE
    - 1. No human cases
    - 2. 7 equine cases
  - iv. No LAC
  - v. No Powasson virus (TBD)
- c. Imported cases
  - i. CHIK – 5
    - 1. Most from tropical Americas
    - 2. One from India
  - ii. DEN – 25
    - 1. About half from the Americas
    - 2. About half from India
  - iii. ZIKV- 112
    - 1. About a 50/50 split between the Caribbean and Central America
    - 2. 4 cases were actually from 2015
- d. Specific info on arboviruses
  - a. EEE surveillance
    - i. Mosquitoes – 90+ pools
      - 1. All *Cs melanura*
      - 2. MIR – 1.009
      - 3. Tested with VectorTest and confirmed by RT-PCR
    - ii. Sentinel chickens – 25
    - iii. Equines – 7
    - iv. No human cases
      - 1. Cases in 2003 and 2012
      - 2. MIR > 0.7 leads to either human cases or lots of zoonotic positives
  - b. WNV Surveillance
    - i. First detected in 2002
    - ii. MIR 4 or greater increases risk for human disease
    - iii. *Culex salinarius* positives associated with human cases