ZIKV Update – Abelardo Moncayo

a. Background
   i. (+)ssRNA flavivirus
   ii. Transmission routes
       1. Mosquito
       2. Pregnant woman to fetus
       3. Sex
          a. Females 8 weeks
          b. Males 6 months
       4. Blood transfusion and other fluids
   iii. Attack rate ~75%
   iv. Incubation period 3-14 days
   v. Viremia
      1. 7-10 days (serum 7 days)
      2. Urine
      3. Semen
   vi. Prevention is key
b. Worldwide transmission
   i. 198607 confirmed cases
   ii. 540176 probable cases
   iii. 76 counties/territories
      1. 29 with microcephalic
      2. 21 with GBS
      3. 17 with sexual transmission
c. US
   i. Travel associated
   ii. Sexually transmitted
   iii. GBS
   iv. Pregnant women
      1. Birth defects
      2. Pregnancy losses
   v. Locally-acquired cases
d. Tennessee
   i. Made reportable in Feb 2016
      1. 651 preauthorized for testing
      2. Most are testing as not a case
      3. 64 confirmed or probable
      4. Peak was in Aug
   ii. Testing
      1. Primarily through a public health lab
      2. Low numbers of commercial lab testing – some issues
   iii. Specimen collection
      1. Originally serum
2. Changed over to urine testing
   iv. Population affected
      1. Vacation travelers
      2. Mission trips

  e. Case characteristics
     i. More female than male
     ii. Most cases in the 20-39 age group
     iii. Next largest age group is 40-59
     iv. Regions
         1. Caribbean
         2. Central America
         3. South America

  f. Local response
     i. Education within 200 yards of case
     ii. Source reduction
     iii. Talk about testing, esp to pregnant women

  g. No *Aedes aegypti* collected