What's Next? – Ture Carlson

- a. One approach what is happening now
 - i. Zika
 - ii. Yellow fever
 - iii. CHIK
 - iv. Rift Valley
 - v. Dengue
- b. Globalization
- c. What is happening, besides Zika?
 - i. Yellow fever in Angola
 - 1. Big outbreak
 - a. Imported cases elsewhere
 - b. Some local transmission in other areas
 - c. In Angola
 - i. 6000 suspected cases
 - ii. 884 confirmed
 - iii. 400+ deaths
 - 2. Shortage of vaccine
 - a. Finally got ~88% of population vaccination
 - b. Lots of issues
 - i. Product lost in transport
 - ii. Reduced dose size gives temporary immunity
 - iii. Global supply deplete
 - iv. Fake vaccination cards
 - 3. Brazil
 - a. First case onset 12/18/16
 - b. Over 400 suspected cases
 - c. Largest outbreak since 2000
 - d. Why deforestation?
 - ii. Chikungunya
 - 1. Large numbers of cases in South and Central America
 - 2. Outbreak in Pakistan 2017
 - 3. Outbreak in India 2016
 - iii. Rift Valley
 - 1. Small outbreak in areas of Africa
 - 2. Virus found in body fluids for months
 - iv. Dengue
 - 1. Hawaii 2015-2016
 - 2. Americas
 - 3. Annually, 390 million cases (WHO)
 - 4. Vaccine is now in use in a few areas
 - v. Malaria
 - 1. Venezuela

- a. Political chaos
- b. Surge in malaria
- 2. Cuba
 - a. 2017
 - b. 10 confirmed cases
 - c. Good mosquito control
- d. A "new" viruses Mayaro
 - i. Dengue-like
 - ii. Alphavirus
 - iii. Isolated in 1954
 - iv. Animal reservoirs
- e. Lots of possibilities out there
- f. Mosquitoes are also on the move