THE EMERGING DISEASES - THE HEMORRHAGIC FEVERS
MARBURG, EBOLA AND LASSA FEVERS

A. HISTORY OF EBOLA

1. SUDDEN APPEARANCE OF MARBURG HEMORRHAGIC FEVER - 1967
   a. IMPORTATION OF AFRICAN GREEN MONKEYS
   b. INFECTION OF HANDLER IN BELGRADE
   c. INFECTION OF WORKERS IN MARBURG & FRANKFURT
   d. TOTAL OF 37 INFECTED
   e. FATALITY RATE WAS 25% AND CONTINUES TO BE ABOUT 25-30% IN MORE RECENT OUTBREAKS

2. JUST AS SUDDEN, EBOLA HF APPEARED IN 1976
   a. FIRST CASES IN YAMBUKU, ZAIRE (DRC)
      1) 318 CASES, FATALITY RATE 88% (280)
      2) MAINLY FAMILIES & HEALTH CARE WORKERS
      3) NO EVIDENCE OF RESERVOIR HOST
   b. A SECOND OUTBREAK IN THE SUDAN - SAME YEAR
      1) OUTBREAK IN NZARA, MARIDI
      2) AGAIN FAMILY MEMBERS AND CLINIC STAFF
      3) 284 INFECTED, 53% (150) DIED

3. 1979 - SECOND OUTBREAK IN NZARA
   34 CASES, 65% (22) DIED

4. SOME INDIVIDUAL CASES - UNTIL

5. EBOLA-RESTON EPISODE "THE HOT ZONE" - 1989-90
   a. MONKEYS FROM THE PHILIPPINES "LONG-TAILED MACAQUES"
   b. HOUSED IN RESTON, VA
   c. MONKEYS HAD TO BE DESTROYED
   d. FOUR HUMAN CASES W/O SYMPTOMS

6. 1994-95 (TWO EBOLA-ZAIRE OUTBREAKS)
   a. OUTBREAK IN GABON - 31 CASES, 68% MORTALITY
   b. THE KIKWIT OUTBREAK
      1) 315 CASES, 81% MORTALITY (255 DEATHS)
      2) AGAIN FAMILIES AND HOSPITALS
      3) CAUSED CITYWIDE PANIC AND QUARANTINE
      4) FOLLOWED INDEX CASE TO LOOK FOR RESERVOIR - AGAIN NOT FOUND

7. RECENT CASES
   a. 2000-
      1) UGANDA, GABON AND DRC
      2) UGANDA CASES (425) ARE EBOLA-SUDAN
      3) THOSE IN GABON AND DRC ARE EBOLA-ZAIRE

B. THE LASSA FEVER OUTBREAK

1. 1969 CASES
   a. TWO NURSES IN LASSA, NIGERIA
   b. ONE INFECTED NURSE BROUGHT TO USA
      1) TWO LAB WORKERS AT YALE ARBOVIRUS RESEARCH LAB INFECTED, ONE DIED

2. LASSA FEVER VIRUS IS WIDESPREAD IN W AFRICA