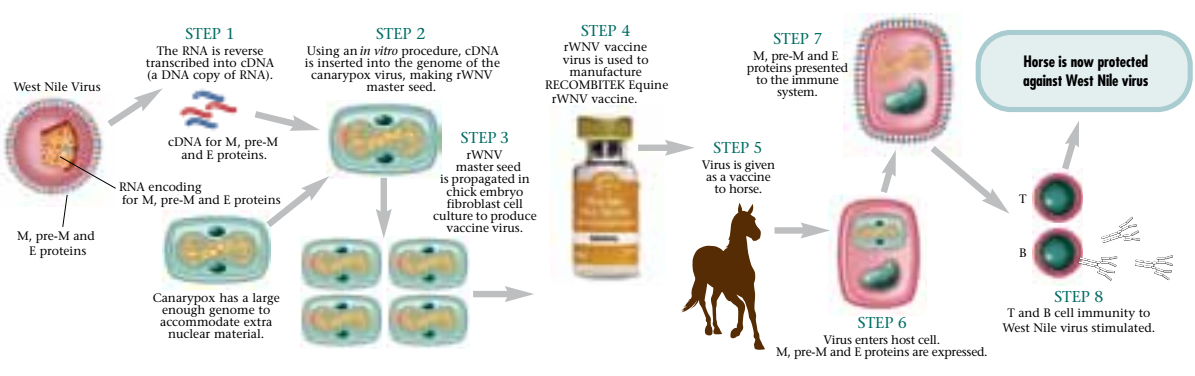
West Nile Virus
M, pre-M and E proteins
RNA encoding for M, pre-M and E proteins
STEP 1
The RNA is reverse transcribed into cDNA (a DNA copy of RNA).
cDNA for M, pre-M and E proteins.
STEP 2
Using an *in vitro* procedure, cDNA is inserted into the genome of the canarypox virus, making rWNV master seed.
Canarypox has a large enough genome to accommodate extra nuclear material.
STEP 3
rWNV master seed is propagated in chick embryo fibroblast cell culture to produce vaccine virus.
STEP 4
rWNV vaccine virus is used to manufacture RECOMBITEK Equine rWNV vaccine.
STEP 5
Virus is given as a vaccine to horse.
STEP 6
Virus enters host cell. M, pre-M and E proteins are expressed.
STEP 7
M, pre-M and E proteins presented to the immune system.
Horse is now protected against West Nile virus
T
B
STEP 8
T and B cell immunity to West Nile virus stimulated.